

Growing Up in Scotland

Using the findings from the Growing Up in Scotland study – a guide for Local Authorities

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Using the findings from Growing Up in Scotland to inform policy development and service planning at the local level –

A Guide for Local Authorities and Health Boards

Contents

	Page
1. Introduction	3
2. Background Why was GUS commissioned? Topic outline How is the study carried out? Where are we now? Who is carrying out the study?	3
3. How GUS findings can be used Context, including National Outcomes Deduction	6
4. Some examples of the implications for policy and services at the local level	8
5. Sub-national analysis Urban/ rural classification Area deprivation level Examples of analysis by urban/rural classification and area deprivation level	9
6. Opportunities for further analysis of GUS data	15
References	16
Annex 1 – List of useful tables and figures	17

1. Introduction

Growing Up in Scotland (GUS) is one of the largest longitudinal research studies ever carried out in Scotland. Launched in 2005, researchers are following the lives of 8,000 children and their families from infancy, through the early years and beyond.

GUS is a nationally representative study. Although findings cannot be reported at Local Authority or Health Board level, this does not mean that GUS has no relevance to Local Authorities, Health Boards and other local agencies. The size of the sample does not allow for meaningful analysis at the local authority level (the sample would have to be at least twice as big to facilitate local analysis). However, in combination with other data sources, such as the Census, GUS findings can be used to deduce or estimate what is happening locally.

This paper aims to suggest how the findings might be used to inform the planning and delivery of services for children and families at the local level. It also suggests how the findings may be used to provide contextual information for reporting on Single Outcome Agreements.

2. Background

Why was GUS commissioned?

In 2003, the Scottish Executive commissioned a review of its need for longitudinal data. This identified two significant gaps, relating to the early years and to youth transitions. In view of this, a decision was taken to launch a new birth cohort study with a particular focus on children and families in the early years.

Although there are other birth cohort studies that include Scotland (most notably the Millennium Cohort Study), GUS is distinctive in that:

- It has a distinctly Scottish focus with a sample size large enough to support subgroup analysis within Scotland
- It is driven by the needs of policy-making, with a particular focus on access to, and use of, services
- It has an intensive focus on the early years.

Topic outline

Although primarily intended to provide information to support policy-making at national and local level, GUS is also intended to be a broader resource to be used by academics, voluntary organisations and others. The content of the GUS questionnaires is directed by a Policy Advisory Group at the Scottish Government.

Topics covered are:

- Characteristics and circumstances of children and their families
- Pregnancy and birth
- Parental support
- Parenting styles and responsibilities
- Childcare and work-life balance
- Child health and development
- Parental health
- Housing, neighbourhood and community
- Food and eating
- Activities with others
- Experiences of pre-school education
- The transition to primary school

GUS also includes:

- A partners' interview at Sweep 2
- Height and weight measurements of children to calculate BMI
- Cognitive testing of the younger children at Sweeps 3 and 5 (educational exercises, based on the British Ability Scales)
- Data linkage to administrative records (with parents' consent)

How is the study carried out?

There are 2 groups or 'cohorts' of children participating in GUS. The 'baby' cohort, aged approximately 10 months at the time of the first interview, comprises 5,217 children born between June 2004 and May 2005. The 'child' cohort, aged approximately 34 months at the first interview comprises 2,859 children born between June 2002 and May 2003. A new birth cohort will be introduced in 2011.

Parents in both cohorts are interviewed annually in their own homes until the sample child is aged nearly 6. Each year of interviews is referred to as a 'sweep'. It is intended that beyond age 6 interviews will take place less frequently and at key transition points, for example just before and after the transition from primary to secondary school.

The GUS sample was taken from DWP Child Benefit records. A named sample of approximately 12,930 children was selected to give an achieved sample of approximately 8,000 overall. An initial response rate of 80% was achieved, an excellent response for a survey of this type and scale, with around 90% of these respondents participating in further interviews at subsequent sweeps.

For more detail on methodology and sample design please see the GUS Main Reports, available from the GUS web site www.growingupinScotland.org.uk

Where are we now?

Findings from the first four years of the study have been published. Following Sweeps 1 and 2, Main Reports summarising key findings on most topics were produced. Following Sweeps 3 and 4, a series of shorter, policy relevant reports were produced on a range of topics including 'Parenting and the Neighbourhood context', 'Health inequalities in the early years' and 'Children's social, emotional and behavioural characteristics at entry to primary school'.

To access study findings and for more information, please see the GUS web site www.growingupinScotland.org.uk

For an 'A-Z' of published findings by topic, please see: <http://www.crfr.ac.uk/gus/publictopic.html>

Sweep 6 of GUS is currently underway, with families in the younger cohort being visited shortly before their child's 6th birthday. A new birth cohort will be recruited soon, with interviewing taking place from January 2011.

Who is carrying out the Study?

GUS is funded by the Scottish Government and is being carried out by the Scottish Centre for Social Research (ScotCen) in collaboration with the Centre for Research on Families and Relationships (CRFR) at the University of Edinburgh and the MRC Social and Public Health Sciences Unit in Glasgow.

3. How GUS findings can be used

GUS findings can be used in 2 main ways – firstly to provide contextual information and secondly, to deduce or estimate circumstances at the local level, where possible.

(i) Context

GUS findings can be used to provide contextual information to inform a range of planning functions carried out at the local level. For example:

Integrated children's services planning
Childcare Strategies
Community Planning/ Neighbourhood Planning
Health Improvement Strategies
Parenting advice and support strategies

GUS findings can also be used to provide contextual information to support the reporting of performance against local and national objectives and outcomes. The Concordat agreed between The Scottish Government and COSLA in November 2007 includes the intention to establish new outcome agreements between local government and national government, to be aligned with the national priorities for Scotland.

GUS provides contextual information in relation to the Government's Strategic Objectives, in particular:

SMARTER – Expand opportunities for people in Scotland to succeed from nurture through to life long learning, ensuring higher and more widely shared achievements.

HEALTHIER – Help people to sustain and improve their health, especially in disadvantaged communities, ensuring better, local and faster access to health care.

In relation to the 15 National Outcomes sitting below the Strategic Objectives GUS can provide context for:

'Our children have the best start in life and are ready to succeed'

GUS includes information about the child's birth and the period immediately after birth. Along with the GUS data from cognitive assessments at age 3, this can support analysis of the effects of the very early circumstances on children's readiness to succeed. GUS also includes information about parents' perceptions of their child's readiness to start pre-school and primary school.

'We have improved the life chances for children, young people and families at risk'

GUS provides an understanding of the impact on a child's life of being born into families at risk. Risk can be identified on a number of levels – household, individual (both parent and child) and area. Risk can also be identified by a range of indicators – low income, lack of employment, family composition, parental age (younger mothers), housing and accommodation, child health and well-being, parental health and well-being, parental alcohol and drug use and area deprivation. GUS will provide detailed information about circumstances and experiences in the early years (from 0 to 5) and in time will enable analysis of how early experience impacts on outcome in later life. Detailed analysis of data from the first year of GUS has already examined the characteristics of two 'at risk groups' - younger mothers and lone mothers – to identify features of 'resilience' in terms of 3 health related behaviours – attendance at antenatal classes, breastfeeding and smoking. Link to report: <http://www.scotland.gov.uk/Publications/2008/03/12101843/0>

'Our young people are successful learners, confident individuals, effective contributors and responsible citizens'

GUS provides data on early child development, behaviour and cognitive ability and can provide baseline information against which to measure progress in relation to the above principles of A Curriculum for Excellence. In time, linking GUS data from the early years period to achievements at school will facilitate analysis of the impact of primary and secondary education to identify those factors which both encourage and inhibit improvement.

'We live in well-designed, sustainable places where we are able to access the services and amenities we need'

At Year 2 of GUS, detailed information about access to local services and attitudes towards neighbourhood was collected, including the views of parents in relation to the local services they believe are most in need of improvement.

(ii) Deduction

When used in combination with other data sources, such as the Census, GUS findings at the national level can be used to deduce or estimate what is happening locally. For example, GUS provides a wealth of information about the circumstances of children living in lone parent families, including the degree of contact with non-resident parents. The profile of lone parent families at the local authority level is likely to be similar to the profile at national level. The proportion of lone parents living in an area can be derived from the Census. Use of childcare is a further example. GUS provides

information about the profile of childcare use across income groups. A similar profile would be expected at the local level (notwithstanding the differences between urban and rural areas – see section 5).

4. Some examples of the implications for policy and services at the local level

Section 3 above has already provided some examples of how GUS findings might be used to inform policy development and service planning at the local level.

Services and facilities

At Sweep 2 of GUS, respondents were asked detailed questions about the availability and use of a range of local services and facilities. Chapter 3 of the Main Report from Year 2 presents the findings from these questions.

Not surprisingly, in general people living in rural areas were less likely to have access to facilities than those living in urban areas. The facilities that were used most often were GP (family doctor), play ground or park area and community health services, with little variation by urban/rural area.

When asked about the services most in need of improvement, facilities for young children was the most frequently mentioned, by 21% of respondents (from the birth cohort). The next most mentioned service/ issue was affordable housing with 12% of respondents wanting improvement to, and provision of good quality affordable housing (this did not vary by urban/ rural area). People living in urban areas were more concerned about the level of crime than those in rural areas (10% compared to 2%) while those living in rural areas were more likely to want improvements to public transport than those in urban areas (9% compared to 4%).

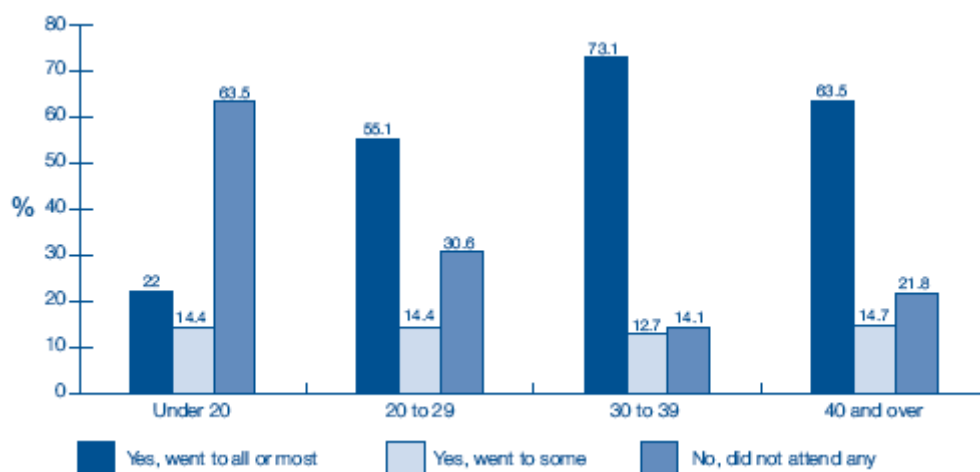
Antenatal classes

Attendance at antenatal classes has been shown to be beneficial in providing a range of advice and support for new mothers – including improving the rates of intended and actual breastfeeding (see CRFR Research Briefing 36 'Breastfeeding in Scotland: the impact of advice for mothers') <http://www.cfr.ac.uk/Reports/rb36forweb.pdf>

Figure 3-H from the Sweep 2 report shows that antenatal classes are failing to reach very significant numbers of younger mothers, and especially those in the youngest age group. Around two-thirds

of first time mothers under 20 did not attend any classes. By contrast, almost three-quarters of first time mothers aged 30 to 39 went to all or most classes.

Figure 3-H Maternal attendance at antenatal classes by age of mother at birth of cohort child (first-time mothers only)



This information would be useful in informing strategies to improve the delivery of information and advice to pregnant women (and their partners) through increased attendance at antenatal classes.

Good Practice Example

In West Lothian, Sure Start delivers the 'YM2b' programme, aimed at young women under 20 who are pregnant. The service provides antenatal information, support and the chance to meet with other pregnant young women in West Lothian:

http://www.wlcsurestart.org.uk/ante_natal_services.htm

5. Sub-national analysis

Although findings are not available at Local Authority or Health Board level, there are two ways in which GUS findings can be reported at the sub-national level – urban/rural classification and area deprivation level. These levels of reporting may be of use to some Local Authorities by providing more detailed information about how the experiences and circumstances of young children and their families can vary by location.

Urban/rural classification

The urban/rural classification is based on the Scottish Government's 6-fold classification, as defined in the Table 1 below.

Table 1 - Scottish Government Urban/Rural Classification

Scottish Government Urban/Rural Classification	
1. Large Urban Areas	Settlements of over 125,000 people
2. Other Urban Areas	Settlements of 10,000 to 125,000 people
3. Accessible Small Towns	Settlements of between 3,000 and 10,000 people and within 30 minutes drive of a settlement of 10,000 or more
4. Remote Small Towns	Settlements of between 3,000 and 10,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more
5. Accessible Rural	Settlements of less than 3,000 people and within 30 minutes drive of a settlement of 10,000 or more
6. Remote Rural	Settlements of less than 3,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more

For further details on the classification see Scottish Executive (2004) *Scottish Executive Urban Rural Classification 2003 - 2004*. This document is available online at <http://www.scotland.gov.uk/Publications/2004/06/19498/38784>

Table 2 below shows that 70% of children participating in GUS live in large urban or other urban areas. 17% live in accessible rural or remote rural areas while 13% live in small towns.

Table 2 - Relative proportions of Scottish children across urban-rural areas: Growing Up in Scotland (GUS) sample and census data

Area urban-rural classification	GUS sample (%)			Children aged 15 and under ¹
	Birth cohort	Child cohort	All	
Large Urban	39	37	38	37
Other Urban	32	32	32	30
Accessible Small Town	9	11	10	11
Remote Small Town	3	3	3	3
Accessible Rural	13	14	13	13
Remote Rural	4	4	4	6
Bases	5217	2858	8075	972,065

¹ Source: General Register Office for Scotland (2003) (based on the 2001 Census).

The GUS sample is significantly large to pick up any significant differences (where they exist) between urban and rural areas. However, even with a sample of 8,000 there are limitations in the extent to which complex analyses of sub-groups can be carried out. For example, it is not possible to compare the experiences of lone parents in urban and rural areas due to the small numbers of lone parents in some categories (notably remote rural and small rural towns) (Jamieson, L et al, 2008)

An analysis of the experiences of children growing up in rural Scotland is presented in the report from Sweep 1 of GUS – ‘Growing Up in Rural Scotland’:

<http://www.scotland.gov.uk/Publications/2008/03/12110107/0>

Area deprivation level

GUS uses the Scottish Index of Deprivation (SIMD) to present findings in relation to area deprivation level. The SIMD is presented at Data zone level, enabling small pockets of deprivation to be identified. Under the SIMD 2006, the data zones are ranked from the most deprived to the least deprived across 7 domains: current income; employment; health, education, skills and training; geographic access to services; housing and crime.

For the purposes of reporting GUS findings, the full SIMD index is separated into quintiles and each case is assigned a quintile based on residential postcode. Quintiles are percentiles which divide a distribution into fifths i.e., the 20th, 40th, 60th and 80th percentiles. For example, those respondents whose postcode falls into the first quintile are said to live in one of the 20% least deprived areas in Scotland. Those whose postcode falls into the fifth quintile are said to live in one of the 20% most deprived areas in Scotland.

Table 3 below indicates that 25% of children in the GUS sample live in the 20% most deprived areas or Scotland. 18% live in the 20% least deprived areas.

Table 3 - Relative proportions of Scottish children across SIMD quintiles: Growing Up in Scotland (GUS) sample at Sweep 2

SIMD (2006) Quintiles	GUS sample (%)		
	Birth cohort	Child cohort	All
1st quintile (least deprived)	18	19	18
2nd quintile	20	19	19
3rd quintile	19	20	20
4th quintile	18	17	18
5th quintile (most deprived)	25	24	25
Bases (Sweep 2)	4473	2472	6945

Examples of analysis by urban/rural classification and area deprivation level

Urban /rural classification and area deprivation level are 2 of the key analysis variables¹ used in the reporting of GUS findings. In relation to the topics covered by GUS, where there are significant differences between urban and rural areas and between deprived and more affluent areas, these are reported in the main reports for Sweeps 1 and 2.

For example, Figure 2-C from the GUS Sweep 1 report indicates a strong link between the age of the mother at birth of the cohort child and the level of deprivation of the area in which the family lives. Half of teenage mothers lived in areas in the most deprived quintile, whereas only 3% lived in areas in the least deprived quintile. Mothers who had the cohort child in their 30s or 40s, by contrast, were much more likely to live in the least deprived areas (27% and 28% respectively). These findings might be used to develop a profile of mothers in particular areas and to target services accordingly.

¹ The other key analysis variables are: sample type (birth cohort or child cohort), sex of child, family type (couple or lone parent), number of children in household, whether 1st time mother, household income, social class, highest education qualification of mother, age of mother at time of sample child's birth, employment status.

Figure 2-C Age of mother at birth of cohort child by level of area deprivation

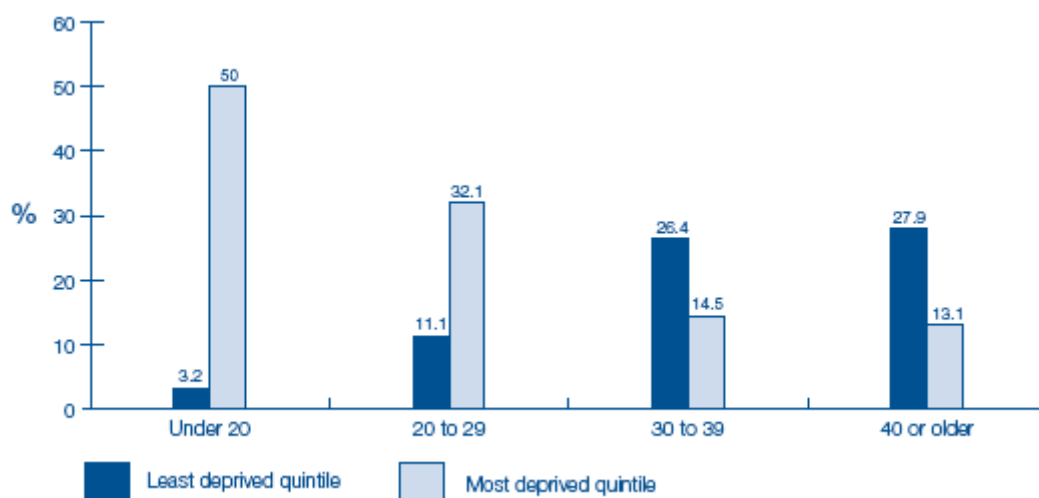


Figure 4-H from the GUS Sweep 1 report highlights lower rates of breastfeeding in more deprived areas. This information suggests a need to direct resources to such areas to improve breastfeeding rates as part of wider health improvement strategies.

Figure 4-H Cohort children actually breastfed by sample type and area deprivation quintiles

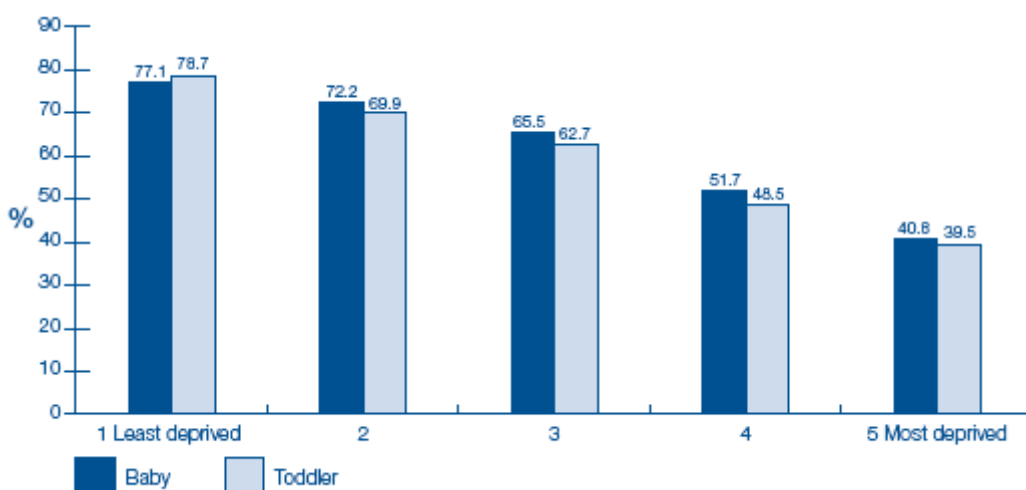
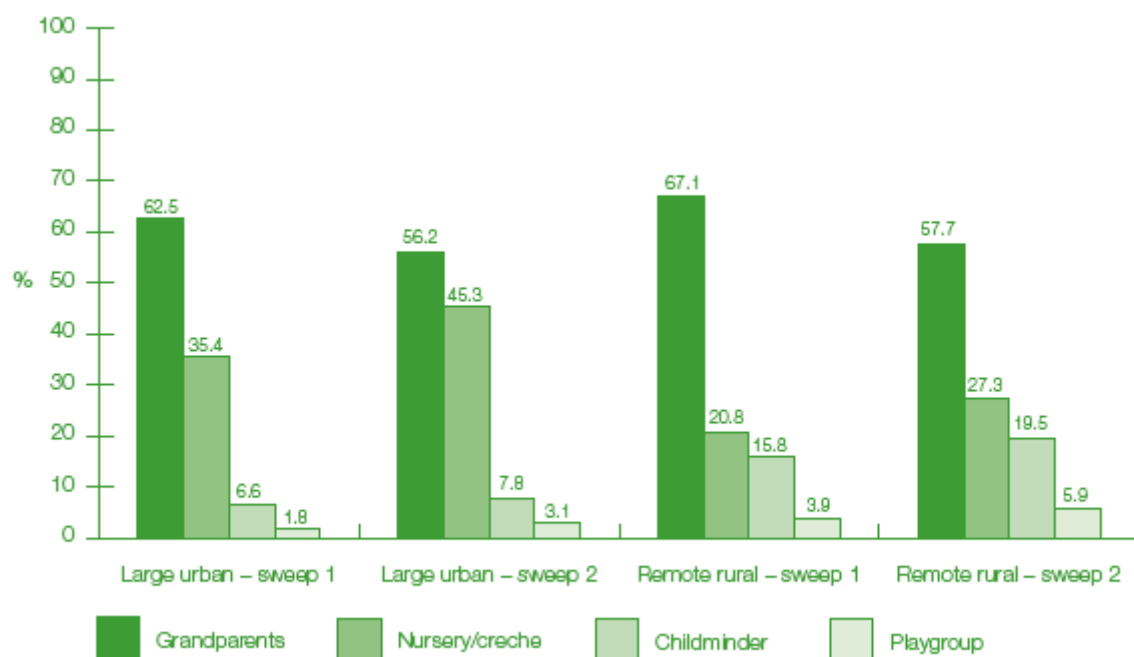


Figure 9-F from the Sweep 2 report highlights the continuing differences in the use of various types of childcare provision between large urban areas and remote rural areas. Nurseries are more commonly used in large urban areas while there is higher use of childminders and playgroups in remote rural areas. These findings might be used to inform the planning and development of childcare services.

Figure 9-F Use of specific childcare provision by families in large urban and remote rural areas by sweep: birth cohort



Annex 1 to this report provides a list of all the potentially useful tables and figures available within the GUS Main Reports from Sweeps 1 and 2 where findings are available by urban/rural classification or by area deprivation level.

6. Opportunities for further analysis of GUS data

The findings presented in the GUS Main Reports and Topic Reports represent a small fraction of the analysis possibilities from this powerful dataset. As further Sweeps of data collection are completed, the potential for longitudinal analysis increases.

The data from Sweeps 1 to 3 of GUS is available to download from the UK Data Archive/ ESDS making this a rich resource freely accessible to anyone with an interest in the field:

<http://www.esds.ac.uk/findingData/snDescription.asp?sn=5760>

Looking at the data documentation prior to downloading the data is recommended. The data documentation for Sweeps 1 to 3, including a copy of the questionnaire and a User Guide can be downloaded from the Data Archive or from the GUS web site (Using GUS data button) <http://www.crfr.ac.uk/gus/using%20data.html>

The data is available in SPSS and STATA.

Sweep 4 data will be deposited during summer 2010.

If a need for further analysis is identified, but the skills are not available within your local authority/ health board/ organisation, there is the possibility of collaborative working with ScotCen/CRFR/ other academic institutions. To discuss any ideas for potential further research, please contact Lesley Kelly at CRFR on 0131 651 5004/ lesley.kelly@ed.ac.uk in the first instance.

REFERENCES

Jamieson,L et al (2008) *Growing Up in Rural Scotland*. Edinburgh:
The Scottish Government

ANNEX 1 LIST OF USEFUL TABLES AND FIGURES FROM GUS MAIN REPORTS

SWEEP 1

Figure 2-C	Age of mother at birth of cohort child by level of area deprivation
Figure 2-F	Area deprivation quintiles by family type
Figure 4-H	Children actually breastfed by sample type and area deprivation
Figure 5-E	Grandparental support by area urban/rural classification
Figure 5-J	Attendance at mother and baby/toddler groups by urban/rural
Figure 8-b	Use of childcare by area urban/rural classification
Table 8.8	Average cost of childcare per week by urban/rural classification
Table 8.9	Ease or difficulty in paying for childcare by area deprivation
Figure 9-A	Self-assessed general health by area deprivation quintiles
Figure 9-D	Smoking during pregnancy by area deprivation quintiles
Figure 9-E	Alcohol consumption by area deprivation quintiles

SWEEP 2

Figure 3-A	% of families who have access to a car by selected variables (inc. rural urban)
Table 3.3	Local availability and use of facilities by area urban rural classification
Table 3.4	Services and issues most in need of improvement in local area by area urban rural classification (birth cohort only)
Figure 8-E	Attendance at parent and toddler/child groups by cohort and area accessible/remote classification
Figure 9-F	Use of specific childcare provision by families in large urban and remote rural areas by sweep (birth cohort)
Table 9.5	Average cost of childcare per week by urban/rural classification
Table 10.1	Type of pre-school attended by area urban/rural classification
Table 10.2	Whether state or private pre-school provider by area urban/rural classification