

Goodna Longitudinal Study

Health, Wellbeing and Community Life Survey

Technical Report 2002



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Goodna Longitudinal Study Health, Wellbeing and Community Life Survey Technical Report

1. Introduction

The Goodna Longitudinal Study, Health, Wellbeing and Community Life Survey, was conducted by the Office of the Government Statistician (OGS) from Friday 31 May to Sunday 30 June 2002.

The aim of the survey was to test the survey methodology and obtain baseline data for a longitudinal study of the Goodna community. Follow-up surveys are planned to be conducted periodically over the next three years to measure perceived changes in areas of interest.

The main objectives of the survey were to:

- determine people's perceptions of community wellbeing and the quality of services available to the Goodna community;
- determine respondent reaction to the survey;
- identify any problems with the questionnaire;
- measure the time per interview;
- measure the response rate; and
- measure any other factors which would impact on the future repeats of this survey.

The methodology used for the survey is described in Section 2. Operational results and interviewer feedback are reported in Section 3. Issues to consider are described in Section 4.

2. Survey Methodology

The survey was conducted by face to face interviewing. Eleven people from the Goodna community undertook the interviewing. A further interviewer was used at the completion of the collection phase to contact households that could not be contacted during the collection phase and to carry out validations of the results obtained by the eleven interviewers.

2.1 Scope of the survey

The inscope survey population was all people aged 18 years or over who were usually resident in private dwellings in Goodna.

2.2 Survey frame

The frame of addresses was obtained from the Ipswich City Council, which has a database of all properties located in the suburb of Goodna. From this list, 244 households were chosen at random for the first phase of the longitudinal study.

After screening for private dwelling households with one or more usual residents aged 18 years or over, one usual resident aged 18 years or over was asked to identify people aged 18 years or over living in the household. One person randomly selected from these people was then asked the remaining questions on the questionnaire.

2.3 Sample design and selection

A total sample of 243 households and 13 caravans within the local caravan park was selected for the survey. The sample was designed to achieve at least 150 completed interviews.

3. Operational Results

3.1 Status of sample units at completion of survey

All sample units were attempted and finalised by the completion of the survey. From these, 178 completed or useable partially completed interviews were achieved. The results of **all finalised** sample units in the survey appear below. A sample unit (household) was deemed to be finalised when contact with the household/person had been completed or the household was found to be out of scope for the survey, or the predetermined number of attempts to reach households not answering had been reached.

Status	Number	Percentage
Caravan Park (completed)	13	5.1%
Completed	124	48.4%
Lost Form	1	0.4%
No Answer/Non-Response	17	6.6%
Out of Scope – Address Does not Exist	5	2.0%
Out of Scope Business	2	0.8%
Out of Scope Household – No Usual Resident	8	3.1%
Out of Scope – Vacant Land	3	1.2%
Partially Completed	41	16.0%
Refused Household	33	12.9%
Unable Household – Away	3	1.2%
Unable Household – Dog Preventing Access	1	0.4%
Unable Household – No Access	1	0.4%
Unable Person – Hearing	2	0.8%
Unable Person – Illness	2	0.8%
TOTAL	256	100%

Descriptions of the statuses above are as follows:

Out of Scope – Address Does Not Exist – The interviewer determined that there was no location with that particular street number and address.

Out of Scope Business – The person contacted indicated that the premises was used as a business location only.

Out of Scope Household – No Usual Resident - The person contacted indicated that the premises was a household but there were no usual residents aged 18 years or over living in the household.

Out of Scope – Vacant Land – The interviewer determined that no dwelling was located at the selected address.

Refused Household – A usual resident aged 18 years or over indicated that the premises was a household but refused to provide the initials of the people living in the house, and therefore the survey could not be completed.

Unable Household – Away – When no usual resident aged 18 years or over could be contacted within the call period because they were on holidays or were away from the

household for an extended period of time working and would not return before the completion of the survey.

Unable Household – Dog Preventing Access – The interviewer could not gain access to the property because of a dog.

Unable Household – No Access – The interviewer could not gain access to the property because of fencing, where no visible contact point could be found.

Unable Person – Hearing – The selected person could not be interviewed because they had hearing difficulties.

Unable Person – Illness – The selected person could not be interviewed within the call period because of illness.

3.2 Response rate

The response rate for a survey is the number of interviews that could be used in the analysis as a percentage of all possible interviews that could have been achieved had every in-scope household selected in the sample responded.

Excluding the categories ‘Out of Scope – Vacant House’, ‘Out of Scope – Vacant Lot’, ‘Out of Scope – Business’ and ‘Out of Scope – Household’, the **response rate** for the survey was computed to be **80.5%**.

3.3 Performance against the assumptions made in the design of the survey

Assumption 1: The average total time for a completed interview would be 20 minutes.

Since it was difficult for the interviewers to record times, actual times cannot be given. It was indicated by the interviewers that interview times ranged from approximately 15 minutes to 1 ¼ hours, with the average being 15 – 20 minutes.

Assumption 2: The response rate would be 70%.

The response rate for the survey was 80.5%, much higher than expected.

3.4 Monitoring of interviewers

Monitoring of interviewers was attempted on a number of occasions, but not all interviewers were monitored. As it was difficult to contact the interviewers and OGS did not know the interview times beforehand, only a couple of attempts were made to monitor face to face interviews. Because of this difficulty, a debriefing session after the first week was held with all interviewers, to discuss problems and peruse the forms. Retraining was held at this point on issues that were found to cause difficulties.

3.5 Non English speaking interviews

It was necessary in some instances to conduct the survey in languages other than English. The numbers of interviews and language were as follows:

- Two interviews were conducted in Samoan
- One interview was conducted in Vietnamese.

3.6 Interviewer Feedback – General

The interviewers were asked to provide feedback on respondent reaction to the survey. The following comments were received from the interviewers:

- Interviewers all expressed enthusiasm for the task of interviewing and all said they would do it again if required.
- Some racism was encountered by some of the interviewers.
- One interviewer found that Samoan families were reluctant to talk to her as she was Samoan. Probably due to the fact that it is a small community with reasonably close ties – confidentiality issues with revealing personal information to someone who may know you. She did, however, conduct two interviews in Samoan.
- Interviewers felt that generally the reaction to the survey was good.
- Some interviewers felt that the Service Integration Project (SIP) information brochures improved the respondent's enthusiasm, however, if given out before the interview, respondents tended to be distracted.
- The interviewers felt that they seemed to be interviewing more elderly people than young people. Young people tended to be more reluctant to be surveyed, and if parents were present, they may have tried to influence responses.
- One interviewer encountered five households where the respondent had psychological disturbances.
- The survey was too long.
- It was difficult to stand at people's doors and talk for 20 minutes, whilst negotiating the questionnaire.
- Respondents were reluctant to stand on the door step in poor weather for 20 minutes.
- Format of questionnaire was difficult to negotiate – interviewers felt awkward flipping pages over whilst standing, talking and writing. The thickness of questionnaire was daunting to some respondents.
- Some questions too long – respondents had forgotten what question was when interviewer had finished speaking.
- Interviewers felt that more than two weeks should be allowed, to allow sufficient time to catch workers at home. Interviewers were advised not to interview after 5pm for safety reasons. Suggested leaving the SIP brochure with a calling card. One interviewer was leaving the SIP brochure with her name and phone number across the top.
- The random selection was difficult for some interviewers.
- Cultural problems occurred when interviewing. Interviewers were sometimes made to feel rude requesting some other person in household to answer survey. In some cases, they were refused when the person who answered the door was not selected. Samoan families prefer a parent to speak, rather than younger members of the household. In many Muslim families, the man speaks for the household. In these cases, either refusal may be made or the respondent and dominant family member used body language to communicate appropriate responses.
- Respondents tried to read questionnaire over interviewer's shoulder. In some cases this was appreciated due to literacy difficulties experienced by interviewer.

3.7 Interviewer feedback – questions

- Introduction – too long.
- Q2 – difficult to understand and negotiate for interviewers.
- Q10 – need to define neighbourhood leaders, some cultural groups have own leaders.
- Q11 – need a middle option between 'helpful' and 'just looking out for themselves'.
- Q12 – need a middle option between 'be trusted' and 'can't be too careful'.
- Q15 – age has bearing on answer, lots of 'don't know's' from elderly people.
- Q15 – some people don't believe some of the issues should be defined as 'problems' eg drugs.
- Q20 – 'truancy' question not answered sometimes, some interviewers and respondents didn't know definition, preferred 'wagging school'.

- Q23 – need to define area to get accurate responses to school attendance and satisfaction.
- Q23 – need an ‘other category’ for home schooled: schooled within a 10 km radius?
- Q24/25 – need a ‘not applicable’ category.
- Q27 – no-one required helpline phone numbers.
- Q30 – some interviewers had difficulty determining what ‘European’ languages were, most actually wrote the language down.
- Q31 – ATSI status – some answered ‘Australian’.
- Q33 – difficult to read, understand and code. Some respondents didn’t like ‘de facto’. Some jumped in and answered before all categories read. Needed recall of question 21 (number of children).
- Q38 – Q52 – interviewers found the employment questions difficult to negotiate. Some commented that the categories were not always suitable for respondents.
- Q38 – Q52 – caused difficulty flicking between pages to follow correct sequencing (sometimes had to go back and check answer to previous questions).
- Q38 to Q52 – respondents had good recall of previous 2 years.
- Q38 to Q52 – there was some confusion when filling out ‘was your employment status the same 2 years ago’. Does this mean the same as now or the same as 1 year ago?
- Q53 to Q54 – some respondents reluctant to give income. One interviewer recorded lots of ‘don’t knows’ in the new estate in Cunningham Rise. These may actually be ‘hidden refusals’. Some underestimates in personal income eg single parent with three children – stated income <\$11 000 pa.
- Q60 – needed category for ‘grew up here’ & ‘moved with family’.
- Q61 – needed 0 times.
- Q63 – need to reword categories or better educate interviewers on wording.

3.8 Respondent queries

No queries as a result of the survey were received on the free call number. It is assumed from this, that information provided by the interviewers was sufficient to allay any fears that the respondents may have had regarding the legitimacy of the survey. It was also decided to provide all respondents with a copy of the latest Goodna SIP publication. This publication helped explain some of the current projects that were being undertaken in the area to improve services.

3.9 Preapproach letters

Preapproach letters were sent to all of the respondents selected for the survey. Of these, 6 were returned to OGS as ‘Return to Sender’.

3.10 Editing

Editing was performed by OGS throughout the survey.

It was found that Q38 – Q52 caused most difficulties for the respondents, and as a result, sequencing errors occurred on a number of occasions. This group of questions with quite difficult sequencing would be easily handled in a CATI system, but it was found to be quite difficult in a face to face interview.

The wording of Q20 also posed problems. It was found in the debriefing session held at the completion of the interviews, that the word ‘truancy’ was not understood by some interviewers and many respondents. As a result, this part of the question was left blank on a

number of occasions. Interviewers advised that the word should be changed to ‘wagging school’.

4. Weighting

The frame comprised all properties located in the suburb of Goodna. From this list, 244 households were chosen from which one adult was selected at random for the first phase of the longitudinal study.

The weighting was carried out in two stages. The first stage was to calculate household weights for those households where a useable interview was obtained. In order to determine the household weights, each response was classified as out of scope, inscope responding or inscope non-responding.

The second stage of the weighting involved calculating a person weight for each of the useable responses. The household weight was multiplied by the number of people aged 18 years or over in the household. This weight was then adjusted so that the estimated number of people aged 18 or over by sex and age categories agreed with Census 2001 estimates of the civilian population aged 18 and over provided by the Australian Bureau of Statistics, adjusted for the proportion in private dwellings and interpolated to match the age boundaries in the survey question.

For a detailed description of the weighting scheme for person estimates, see Appendix 1.

For purposes of standard error calculation the sample was considered to approximate a simple random sampling of the adult population, to which post-stratification by age (3 categories), sex and number of adults in the household was then applied. The third classification was included so that all units in a stratum would have the same, or close to the same, probability of selection. Population counts were obtained by summing the final person weights, and thus conformed to the benchmarks used in weighting. Some collapsing of strata was necessary so that standard errors could be estimated for each stratum. Standard formulae could then be applied to estimate overall standard errors. The collapsing has resulted in a slight mismatch with the estimated benchmarks; this has been limited to less than 1% by collapsing strata of approximately the same weight.

5. Output

Tables containing **population estimates of number and percentage** accompanied by 95% confidence intervals for the percentage will be available.

The reliability of population estimates of number and percentage in a cell of a table is also indicated by the use of asterisks. If cell entries have relative standard errors between 25% and 50%, they are marked with one asterisk * and should be treated with caution. Estimates marked with two asterisks ** indicate that the relative standard error is greater than 50%. These estimates are not at all reliable. For a discussion on relative standard errors and 95% confidence intervals see Section 6.

Listings of the contents of ‘Other (please specify)’ categories of relevant questions are also provided.

6. Reliability of Estimate

Estimates based on a sample survey are subject to two types of error:

Sampling error. Estimates based on information obtained from a sample of households may differ from figures that would have been produced if all households had been included in the survey.

Non-sampling error. Errors may also occur due to non-response to the survey, inadequacies of the sampling frame, inaccuracies in reporting by respondents and processing errors.

One measure of the sampling error is the *standard error (SE)*. It measures the extent to which an estimate may vary by chance because only a sample of households were included in the survey.

Given a large enough sample size, there are about two chances in three that an estimate will differ by less than one standard error from the figure that would have been obtained if all households had been included, and about 19 chances in 20 that the difference will be less than two standard errors.

Alternative measures of the sampling error are the *relative standard error (RSE)*, which expresses the standard error as a percentage of the estimate, and the *confidence interval (CI)*.

The RSE of an estimate is given by the following expression:

$$\text{RSE} = (\text{SE}/\text{Estimate}) \times 100$$

where SE stands for the standard error of the estimate.

The general formula for a confidence interval is:

$$\text{CI} = \text{Estimate} \pm Z \times \text{SE}$$

where Z is the appropriate value from the standard normal table. For example, for a 95% confidence interval, Z = 1.96 (often rounded to 2).

7. OGS Recommendations/Issues to Consider

The following issues/recommendations should be taken into consideration when undertaking the follow-up interview for the Longitudinal Survey in 12 months time. The issues/recommendations are based on observations by OGS operational staff, in addition to comments provided by the interviewers.

- Future surveys should use a mix of experienced interviewers and local interviewers. Experienced interviewers were able to obtain a better item response for sensitive items such as income, whereas local interviewers were able to obtain a better engagement with members of the community and thus improve the overall response rate. However, with local interviewers who had no prior experience in this field of work some errors occurred. Supervision was difficult due to the distance involved and the differing work times of interviewers, so it was necessary to allow the interviewers to work unsupervised most of the time. OGS to review field work procedures.
- Q20 – The word ‘truancy’ should be amended to ‘wagging school’.
- Q38 – Q52 – determine if this group of questions asking about transitional employment should be asked in the future.

APPENDIX 1

Weighting Scheme

The steps involved in calculating person weights w_{2p} were as follows:

1. Initial household weights w_{1h} were calculated at the fine stratum level allowing for non-response and out of scopes. Decisions were made on how to classify the result obtained for each telephone number in the sample. There were 3 categories – out of scope, inscope responding, and inscope non-responding. The weight for each out of scope was N_s / n_s and the weight assigned to each inscope responding telephone number was

$$w_{1h} = N_s / n_s * (n_{rs} + n_{us}) / n_{rs} \text{ where}$$

n_{rs} = number inscope responding useable units in each fine level stratum

n_{us} = number inscope non-responding or responding but unusable units in each fine level stratum and

n_s = total fine level stratum sample size (telephone numbers sampled from RDD frame)

N_s = total fine level stratum population size as per RDD frame.

2. For each selected person, a weight was calculated to reflect the probability of their selection

$$w_{1p} = w_{1h} \cdot q_h \text{ where}$$

q_h = total number of people aged 18+ in household h.

3. Now using these weights, the raw survey estimate of the total number of people \hat{T}_{zsa} in each of the benchmark categories zsa by sex (s) by age group (a) was calculated:

$$\hat{T}_{zsa} = \sum w_{1p}$$

all responding people in zsa

4. An adjusted weight for each person was then calculated using:

$$w_{2p} = w_{1p} \cdot (T_{zsa} / \hat{T}_{zsa})$$

where T_{zsa} is an externally derived 'benchmark' of the civilian population in occupied private dwellings in category zsa based on Australian Bureau of Statistics Census of Population and Housing 2001.