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Introduction

- 1. In 2007, Ipsos MORI conducted the fourth in a series of Living in Wales Surveys (LiW) on behalf of the Local Government Data Unit ~ Wales (the Data Unit). Funded by the Welsh Assembly Government, the 2007 Living in Wales Survey will provide the Welsh Assembly Government with information about households and citizens views and opinions on key public services in Wales. The survey provides data which can help provide the basis to assessing Government targets, and informing policy decisions and resource allocation. In time, the data from this survey will be aggregated with data from the 2005 and 2006 surveys. This aggregate data will have the potential to provide information about households at Local Authority level, where questions have appeared in the survey for 3 consecutive years.
- 2. The survey is conducted by Ipsos MORI, with sampling and fieldwork assistance provided by GfK NOP.

Aims & Objectives of the Survey

- 3. Living in Wales is a survey that aims to provide information about the nation's households, the homes in which people live and to give citizens a voice on various issues including citizens' views on their experience of Welsh public services.
- 4. The information collected in the survey will be used for statistical and research purposes by the Welsh Assembly Government in order to inform the policy making process.
- 5. Key headline statistics from the 2007 survey will be published in the form of a First Release, issued by the Statistical Directorate at the Welsh Assembly Government in June 2008. The First Release can be found on the Living in Wales website. www.wales.gov.uk/livinginwalessurvey

The Household Survey

- 6. The Living in Wales Household Survey covers a wide range of topics including attitudes towards public services, the internet, disability, the environment, volunteering and equality issues. The survey was conducted with the Household Reference Person (HRP) or another adult in the household.
- 7. As in previous years, the questionnaire was administered using Computer Assisted Personal Interviewing (CAPI). The questionnaire was fairly lengthy and contained complex routing between questions. Using CAPI allowed the interviewer to carry out the interview much more quickly and efficiently than they would have been able to do using a paper-based questionnaire. Additionally, routing and checking processes were



- programmed into the CAPI system, which made data collection more accurate and complete, and minimised the potential for error.
- 8. A total of 12,754 addresses were issued for the Survey. Ipsos MORI conducted half of the fieldwork, with GfK NOP sub-contracted to undertake the other half. A combined field force of 167 interviewers from both companies carried out the interviews at selected addresses across the whole of Wales.

Ipsos MORI's Responsibilities and Tasks

- 9. Ipsos MORI was responsible for the following tasks:
 - Generating the sample;
 - Scripting the questionnaire into CAPI including all appropriate routing and edit checks;
 - Designing the questionnaire, in close collaboration with the Data Unit;
 - Producing full Interviewer Instructions for the pilot and main survey;
 - Piloting the CAPI questionnaire and fieldwork materials in English and Welsh as well as holding a pilot debrief session to collect feedback from interviewers;
 - Amending the questionnaire and accompanying materials in light of the pilot;
 - Designing and issuing contact sheets;
 - Providing suitably trained interviewers (employed by either Ipsos MORI or GfK NOP) to undertake interviews at the selected addresses in the sample;
 - Training and briefing interviewers on the purpose and background of the survey and all survey procedures including the use of the contact sheet and CAPI questionnaire;
 - Ensuring that all briefings are carried out to a high standard and in a consistent manner;
 - Ensuring interviewers conduct a minimum of two dummy interviews each prior to the start of their 'live' fieldwork period;
 - Despatching letters, with explanatory leaflets, to sample addresses in advance of the interviews;
 - Allocating addresses to interviewers, and setting-up fieldwork monitoring and control procedures;
 - Dealing with queries and refusals from households;
 - Monitoring fieldwork carefully in order to maximise response, and minimise bias in response;
 - Carrying out quality control procedures, such as back-checking interviews/interviewers, (each fieldwork company was



responsible for back-checking their own interviewers). This process involves contacting respondents to check that they took part in the survey, plus checking contact details and some responses to questions;

- Booking-in and data entry of contact sheets;
- Coding Standard Industrial Classifications (SIC) and Standard Occupational Classifications (SOC) in full and National Statistics Socio-Economic Classifications (NS-SEC);
- Full validation of contact sheet and CAPI data; and
- Production of output data in SPSS and syntax.

The Data Unit's Responsibilities

- 10. The Data Unit had the overall responsibility of approving the various stages of the survey on behalf of the Welsh Assembly Government, as well as the following specific responsibilities:
 - Developing the questionnaire in line with policy requirements;
 - Reviewing all translation work (this included a representative from the Data Unit visiting Ipsos MORI's office during the process of finalising the Welsh translation of the CAPI script);
 - Providing Valuation Office Agency (VOA)/ Council tax lists for sampling; devising sampling strategy;
 - Producing some of the briefing materials;
 - Briefing interviewers on the purpose and background of the survey;
 - Providing the definitions of disrepair for first impressions scores;
 - Providing input into the design and wording of fieldwork materials;
 - Writing the Press Release for the survey (Appendix 1);
 - Providing Ipsos MORI with the details of contacts for the advance letters to Local Authorities and Police;
 - Dealing with, or providing assistance with, queries about the survey from households;
 - Specifying the data variables that need to be derived;



- Working closely with Ipsos MORI to develop the data specification;
- Checking data and database quality at the various stages of development; and
- Depositing the data in the National Archive and the survey questionnaire and materials in the Question Bank.

Survey Timescale

11. The overall timing of the survey was as follows:

Initial questionnaire development	April – October 2006
English pilot briefing, fieldwork and debriefing	October – November 2006
Amendments and translation	October 2006 – January 2007
Welsh language pilot	February 2007
Briefings	27 February – 30 April 2007
Main and reissue survey fieldwork	12 March – 31 July 2007
Data preparation and validation	April – October 2007
Data output	October 2007 – April 2008

Questionnaire Development and Piloting

Unit of Survey

- 12. As with the previous three LiW surveys, the unit of survey was the household. On occasions where an address was occupied by more than one household, interviewers were instructed to conduct interviews with up to three households, if possible.
- 13. In the 2004 survey, interviewers collected information on the first impressions of the condition of each property they visited. This information was then used to select addresses to take part in the Property survey. A separate property survey was not conducted this year (or in 2005 or 2006), but the First Impressions dwelling condition information was still collected. This data allows monitoring of the condition of properties each year and will be used to inform the 2008 Property Survey sample design.
- 14. The contact sheet used to collect the above information was largely the same as that used in previous LiW surveys. Basic additional information collected at each address was:
 - Whether the address is occupied, vacant, derelict, demolished, a non-residential property, an institution, or a second/holiday home;
 - General condition of the building, specifically its walls, doors and windows, and roof;
 - Dwelling type;
 - Interviewer estimate of the age of a property;
 - Address identification whether there were any changes to the LiW address provided and, if there were, whether this was because the address had been split, merged, changed or misspelt;
 - Space to note directions, to assist another interviewer if the address needed to be reissued e.g. for remote rural properties;
 - Number of Households/flats at the address;
 - The number of calls made at each sample address; and
 - Detailed refusal information and estimated household characteristics for refusals.



Piloting

- 15. Ipsos MORI carried out a pilot of the questionnaire in October 2006. In order to ensure that all sections of the questionnaire were tested and that regional variations were taken into account, a purposive sampling system was used. Eight interviewers were selected from across Wales. Their location was matched against nearby geodemographic characteristics according to MOSAIC code (MOSAIC is a composite indicator produced by Experian, based on Census data and other sources to identify typical characteristics of an area's population). A suitable nearby postcode was selected for each interviewer to ensure a representative spread of area and household types across the country.
- 16. Interviewers taking part in the pilot were briefed on 17 October 2006 in Cardiff. A total of 70 addresses were issued, with each of the eight interviewers having an allocation of either 5 or 10 addresses. The two interviewers with 5 addresses each took part in the Welsh language pilot a few months later.
- 17. As in previous LiW surveys, separate English and Welsh pilots were conducted. This allowed each of the two versions of the CAPI questionnaire (English and Welsh) to be thoroughly tested while minimising abortive work (i.e. beginning the translation of the Welsh CAPI questionnaire before the English version had been signed-off).
- 18. Interviewers were provided with briefing packs containing:
 - written Interviewer Instructions;
 - printed contact sheets;
 - blank additional contact sheets;
 - spare household letters and household leaflets;
 - a laminated household letter;
 - colour print-outs of 'First Impressions' photographs (as examples of how to assess the condition of the walls, doors, windows and roofs);
 - showcards in English and Welsh;
 - a Word version of the questionnaire for reference; and
 - a laminated First Release from the 2005 LiW Survey.

- 19. The pilot took place in: Cardiff, Carmarthenshire, Gwynedd, Powys, Swansea, Newport and Wrexham. The final number of achieved interviews was 31.
- 20. All post-pilot amendments to the questionnaire and fieldwork materials were discussed and agreed between Ipsos MORI and the Data Unit before Welsh translation commenced.

Post-Pilot Changes

- 21. Nine changes to the questionnaire arose during the pilot briefing and were implemented into the pilot CAPI questionnaire prior to pilot fieldwork commencing (please see Appendix 2 for a complete list of these changes).
- 22. An interviewer debriefing was held on 2 November 2006. Several minor amendments were made to the format or content of some survey materials as a result of the pilot debrief, including the contact sheet, showcards (main and core), household leaflet and interviewer instructions. A complete list of the post-pilot changes can be found in Appendix 3.
- 23. There were 74 amendments made to the questionnaire as a result of the pilot. The full list is in Appendix 2.

Welsh Pilot

- 24. Once Ipsos MORI and the Data Unit had agreed the changes to the English CAPI questionnaire, a rich text format (rtf) version of the questionnaire was exported and sent to an independent Welsh translating company for translation.
- 25. A representative from the Data Unit visited Ipsos MORI on 31 January 2007 to assist with developing and finalising the Welsh version of the CAPI script in preparation for use in the Welsh pilot.
- 26. The Welsh version of the questionnaire was piloted in February 2007. Feedback was obtained through telephone conversations with the interviewers, and mainly focussed on the flow of the Welsh translation and minor spelling or showcard errors. Eight interviews were achieved.



Final Questionnaire

- 27. The 'Making the Connections' (MtC) questions that were introduced in 2006, were included again in 2007, but for a different set of public services. The MtC sections all contain a similar mixture of questions, each based on measuring respondents' experiences with a range of public services. The 2007 MtC sections were:
 - Patient Transport Service;
 - Dental Practices;
 - Train Service;
 - Street Cleaning Service;
 - Library Services;
 - Accident & Emergency;
 - Ambulance Services; and
 - Further Education;
- 28. In 2006, there were more MtC sections included than in 2007, so there were two versions of the questionnaire, with four sections asked in pairs (Local Bus Service and Recycling Facilities sections were only asked on version 1 of the questionnaire and GP Surgery and Sports and Leisure Provision sections were only asked on version 2). This strategy kept the overall length of the questionnaire down to the contracted 50 minutes. This approach was not necessary in 2007. Therefore all respondents were asked all sections of the questionnaire, which was 50 minutes in length.
- 29. The sections of the final questionnaire (excluding the MtC sections listed above) were as follows:
 - Household;
 - Your Home;
 - Disability;
 - Volunteering;
 - Transport;
 - Equalities;

- Environment;
- Internet Usage;
- Housing History;
- Tenure and Housing Costs;
- Economic Status;
- Household Income; and
- Values and opinions.
- 30. Some sections which have featured several times in previous LiW surveys were revised in 2007, including the questions on overcrowding and broadband use. Some new questions were also added to the Tenure and Household Costs section.
- 31. Questions Q74, Q75, TP6, TP9, EQ3, EQ5, Q81, Q84 and Q93, which had been asked in previous years, had revised precodes in 2007 to include some of the answers that had been given in 2006.
- 32. The same recontact question that was asked in 2006 was included in the 2007 questionnaire, at the request of the MtC team at the Welsh Assembly. The recontact question asked "whether the respondent would be willing to be recontacted by the Welsh Assembly Government to take part in further research concerning the issues discussed in the interview". This gave the MtC team the opportunity, if required, to use a suitable method of obtaining more in-depth findings and qualitative views on what people actually think needs to be done to improve services in each of the main public service areas. It also allowed them to contact different segments of the population (including children and young people, women, disabled people, minority ethnic groups and religious groups) to gather their specific views; likely to be done via discussion groups. Three in five (60%) of those who took part in the interview agreed to be recontacted.
- 33. Self-completion questionnaires were not used to examine use of the Welsh language in 2007, as they have been in previous years of the survey. However, questions were included in the survey about ability to speak Welsh and language preference when contacting/being contacted by Welsh public services.

Main Survey

Interviewer Briefing

- 34. Ipsos MORI and GfK NOP each took responsibility for briefing their own interviewers in accordance with a briefing programme and outline devised by Ipsos MORI. Interviewers were not allowed to start work on the survey until they had attended a day-long briefing. Both companies were responsible for selecting experienced and well-trained interviewers to conduct the survey.
- 35. Ipsos MORI and GfK NOP held a total of 13 main interviewer briefings in various locations across Wales (and in North West England). A total of 167 interviewers were briefed with each session attended by up to 25 interviewers, their Regional Managers and supervisors. Ipsos MORI and GfK NOP senior executives led the briefings, with representatives from the Data Unit attending and introducing the background to the survey.
- 36. A "master" briefing was held on 27 February 2007. This briefing was designed to bring together all briefing teams to ensure that a consistent approach was adopted for all subsequent briefings.
- 37. The interviewers who attended the "master" briefing began fieldwork the following day and continued during the week that the main briefings were taking place. This pre-fieldwork 'test' was conducted on 'live' sample i.e. real interviews were conducted. Ipsos MORI then checked the electronic topline data from these interviews, which allowed Ipsos MORI to confirm that there were no routing issues found at that time with the CAPI script before fieldwork started. Unfortunately, there were errors with TP12, TP13 and Q97 (Details on how these were dealt with are described in paragraphs 75-77).
- 38. Ipsos MORI held 5 main briefings between 5 and 9 March 2007. GfK NOP undertook 5 briefings between 5 and 13 March 2007. Only two mop-up briefings were necessary. GfK NOP held one on 17 April 2007 and Ipsos MORI held one on 30 April 2007. All briefings lasted for an entire day.
- 39. A total of 83 Ipsos MORI interviewers were briefed plus Area Managers and supervisors, and 84 GfK NOP interviewers were briefed to work on the survey, plus their Area Managers. Of the 167 interviewers who were briefed, 63% of them (105) had worked on the LiW survey previously.

- 40. It was Ipsos MORI's responsibility to ensure a consistently high standard of briefing, and that all the briefings followed the same briefing programme. The contents of the briefing programme were agreed with the Data Unit, and covered the following:
 - Introduction to LiW;
 - Survey background (Ipsos MORI / Data Unit);
 - Contact procedures, including first impressions and the contact sheet;
 - Exercises on using the contact sheet and additional contact sheet, and coding (both SIC and SOC and 'other' responses).
 - Introduction to the questionnaire;
 - Dummy interview practice on CAPI;
 - Progress reporting; and
 - Field admin issues.
- 41. A copy of the slides used at all the interviewer briefings are in Appendix 4.
- 42. Interviewers were provided with briefing packs containing the main and core showcards to be used during interviews. Half of the interviewers should have been given a normal core showcard, and half should have been given a reversed version. Some interviewers received normal instead of reversed core showcards at the briefings they attended. To resolve this, Ipsos MORI distributed reversed core showcards as part of the main interviewer work packs where necessary.

Interviewer Instructions

43. As a guide to support the information given at the briefings, interviewers were given detailed written Interviewer Instructions. Clear written instructions were given about the 'Making the Connections' sections included in 2007. The interviewer instructions were also amended following feedback from the pilot briefings, as it was suggested that the interviewer instructions relating to the questionnaire should be separated from the general survey instructions. The document was therefore split into two volumes and printed on different colour paper in order for interviewers to quickly distinguish between the two. Copies of the two full written volumes of Interviewer Instructions are contained in Appendix 5 and 6. Interviewers were also provided with a paper copy of the questionnaire for reference purposes.

Dummy Interviews

44. Following the briefings, the interviewers were required to each conduct and submit a dummy interview prior to commencing fieldwork in order to further familiarise themselves with the content and flow of the questionnaire.

Welsh Language Interviews

- 45. Ipsos MORI and GfK NOP both made provisions for interviews to be conducted in Welsh if the respondent preferred this to an English interview. The leaflets that were sent out with the letters prior to the interviewer calling at a property clearly stated that Welsh language interviews are available on request. Welsh interviews were therefore arranged in advance by respondents calling the survey helpline, sending an email to the address in the advance letter or leaflet, or by subsequently requesting a Welsh speaking interview when the original interviewer visited.
- 46. As in the previous surveys, the questionnaire was translated into Welsh by translators approved by the Association of Welsh Translators (Cymdeithas Cyfieithwyr Cymru CCC). Once the English version of the questionnaire had been programmed, an export of the CAPI script was sent to the translators. This was necessary as the CAPI subtexts used varied depending on the routing applicable for each interview. These would not be shown in a Word version of the questionnaire. Only the parts of the questionnaire that had changed since 2006 were translated. This took approximately four weeks to complete.
- 47. Ipsos MORI was responsible for inputting the Welsh translation of the questionnaire into the CAPI script as a second language option. This ensured that identical routing and filtering was used for both languages, and the only difference was the front screen for interviewers.
- 48. The Welsh language pilot was conducted after the English pilot. The Data Unit reviewed the translation to ensure that the Welsh language used matched the context used in the English questionnaire as closely as possible.
- 49. In 2007, the total number of interviews conducted in Welsh using the Welsh CAPI, and in Welsh using the English CAPI (translated by the interviewer) was 213 interviews, 151 by Ipsos MORI and 62 by GfK NOP. The breakdown of this data by Local Authority is shown in Table 1. The use of English CAPI, translated into Welsh by the interviewer, occurred where the interview started in English but the respondent changed to speaking Welsh mid-way through the interview. It also happened when the interviewer and respondent found the Welsh CAPI too difficult to understand and preferred to use their regional dialect instead.

Table 1: Welsh language interviews by Local Authority

Local Authority	Total No. of interviews	No. of Welsh interviews – using Welsh CAPI	No. of Welsh interviews – not using Welsh CAPI	% of interviews in Welsh
Carmarthenshire	337	18	9	8.0
Ceredigion	366	20	29	13.4
Gwynedd	360	44	22	18.3
Isle of Anglesey	348	23	24	13.5
Pembrokeshire	357	5	2	2.0
All other LAs	5,960	14	3	0.3
Total No. interviews	7,728	124	89	2.8
			So.	urce: Ipsos MORI

50. Ipsos MORI had nine Welsh speaking interviewers and GfK NOP had four. They often worked in more than 1 Local Authority, and the distribution of where interviewers lived and worked is shown in the following table:

Table 2: Location of Welsh-speaking interviewers

	Ipsos MORI - interviewer lived	Ipsos MORI - interviewer worked	GfK NOP - interviewer lived	GfK NOP - interviewer worked
Blaenau Gwent	0	1	0	0
Bridgend	0	0	0	C
Caerphilly	1	0	0	0
Cardiff	0	0	0	C
Carmarthenshire	1	1	1	C
Ceredigion	0	3	0	C
Cheshire	0	0	1	0
Conwy	1	1	0	1
Denbighshire	0	2	0	1
Flintshire	0	1	0	(
Gwynedd	5	5	1	2
Isle of Anglesey	0	4	0	2
Merthyr Tydfil	0	0	1	1
Monmouthshire	0	0	0	(
Neath Port Talbot	0	0	0	1
Newport	0	0	0	(
Pembrokeshire	0	1	0	(
Powys	0	1	0	1
Rhondda Cynon Taf	0	0	0	(
Swansea	0	0	0	(
The Vale of Glamorgan	0	0	0	1
Wrexham	1	2	0	(
		_		ource: Ipsos MC

Other languages

51. There were two householders unable to speak English or Welsh. One was Polish and 1 was unknown. These interviews were conducted on CAPI, and another household member acted as an interpreter.

Fieldwork

Printing Survey Materials

- 52. All fieldwork materials were either printed by Ipsos MORI, or an external approved printing company (Formara) which Ipsos MORI was responsible for liaising with. Please see Appendix 7 for the printing specification provided to Formara.
- 53. Formara printed all contact sheets, household letters and leaflets on behalf of Ipsos MORI, as well as the majority of the briefing materials. Contact sheets were printed with the address number, bar code, check digit, sample type, household number (all were '1') and sample address pre-printed on the front of the contact sheet. Additionally the sample address was printed on the back of the contact sheet to assist interviewers in making changes to the postal address, where necessary. A Kish Grid was printed onto the second page, along with instructions, for occasions when interviewers would need to select dwellings or households.
- 54. Copies of the final survey materials are appended. An example of a contact sheet with printed information can also be found in Appendix 8.

Contact Sheet Details

- 55. An address contact sheet was produced for every address in the sample. The contact sheet was split into sections including:
 - Postal address;
 - Ipsos MORI's address number;
 - Check digit;
 - Household number (always '1');
 - Sample type;
 - Grid reference;
 - Interviewer name and number;
 - Contact record;
 - Dwelling information and selection;
 - Introduction paragraph;

- Household selection;
- Kish selection;
- Address changes;
- Consent to be recontacted signature box;
- Final outcome;
- Refusal information; and
- Estimated household characteristics for refusals.
- 56. In previous years the consent to be recontacted signature box did not appear on the contact sheet respondents were able to sign to give their consent on the interviewers' CAPI machines. Interviewers were supplied with new CAPI machines in 2007, which did not allow respondents to sign the screen. The recontact signature box was therefore printed on the contact sheet, and respondents were asked to sign on the contact sheet instead (as well as the interviewer recording on the CAPI machine whether the respondent was willing to be recontacted). Due to space restrictions, the signature box was only printed on the contact sheets in English. Ipsos MORI therefore supplied interviewers with stickers printed with the Welsh translation of this box to apply to contact sheets where necessary.
- 57. Information recorded on the contact sheet was checked and booked-in at Ipsos MORI, including:
 - Address information on the front cover;
 - Address changes;
 - Signature in recontact box or not;
 - Final outcome; and
 - Refusal information.
- 58. All pages from the contact sheets were then transferred to Data Liberation (an Ipsos MORI approved data processing supplier) to be scanned for full data capture.
- 59. Where second and third interviews were conducted at the printed address (either due to more than one household living there, or more commonly, due to the address having been converted into separate dwellings) the interviewer used an Additional Contact Sheet (Appendices 12 and 13), which has the same layout as an ordinary contact sheet, but without any



mail-merged address information. All data was hand written on by the interviewer.

Linking Address Contact Sheet to Questionnaire

60. Interviewers were encouraged to return contact sheets to Ipsos MORI head office as soon as possible. Interview data from CAPI was received on a continual basis. A preliminary stage of the CAPI interview required interviewers to enter the address number. This allowed the contact sheet data to be linked to the correct CAPI data. After entering the address number into CAPI, a screen appeared with the corresponding address as a check that interviewers had entered the correct address number. Interviewers were also asked to input the address at the end of the interview, as another check.

Scanning Contact Sheets

61. It was important that Ipsos MORI received contact sheets back from interviewers as soon as possible in order for reissues to be sent out quickly. Scanning the contact sheets meant that the field office would always have a record, and so loss of contact sheets between reissues, due to losing them in the post or interviewers mislaying them, was minimised.

E-Progress

- 62. E-progress (an electronic version of the contact sheet) was completed by interviewers each day. This means that the field office has up-to-date information about each interviewer's progress throughout fieldwork.
- 63. At the end of each day's fieldwork, the interviewer opened the e-progress form on their CAPI machine and entered the outcome of each visit made. The outcomes listed were very similar to the contact sheet, and a screen shot of the e-progress is in Appendix 9.
- 64. A new 'non-final' code was included in e-progress in 2007 'broken appointment'.

Interviewer Pack

- 65. The interviewer packs distributed at the briefings contained the following items:
 - Example contact sheet (Appendices 10 and 11);
 - Example additional contact sheet (Appendices 12 and 13);

- Paper version of the questionnaire (Appendix 14);
- Interviewer Instructions (Appendix 5 and 6);
- Main showcards, produced in a bilingual (English and Welsh) format in a comb-bound book with English on one side and Welsh on the other (Appendices 15 and 16);
- Core showcard (Appendix 17);
- Example household letter (Appendix 18) and laminated letter;
- Example household leaflet (Appendix 19);
- Colour photographs and descriptions of the state of repair of windows, doors, walls and roofs (Appendix 20);
- Extract from the 2005 First Release report from the Data Unit (Appendix 21);
- A language card for identifying what language is spoken at non-English or non-Welsh speaking households; and
- Interviewer calling cards.

Notifications

- 66. Advance letters were sent to all households before the main fieldwork started. Ipsos MORI was responsible for drafting the letters (with approval from the Data Unit) and sending them out printed on Living in Wales survey letter-headed paper, along with the Welsh Assembly Government and Ipsos MORI logos.
- 67. The letters and leaflets were translated into Welsh, and the address and reference information mail-merged onto both the English and Welsh sides of the letters, to ensure the languages were treated equally.
- 68. The advance household letters and leaflets were printed by Formara, who were also responsible for putting a letter and a leaflet in a first class stamped (not franked) envelope. The envelope had the Living in Wales logo printed in colour on the front, to make it stand out from other mail householders might receive. These were then dispatched to interviewers so that they could post the letter a few days before they were due to visit the



- property, therefore keeping the letter as fresh in the minds of the potential respondents as possible. A copy of the letter to households and the household leaflet can be found in Appendices 18 and 19, and the envelope is contained in Appendix 22.
- 69. Before fieldwork began, letters were also sent to all of the Local Authority Chief Executives, Chief Housing Officers, Chief Environmental Health Officers, and where possible the Press and Communications Officers. Ipsos MORI also wrote to all Police Authority Chief Constables. The letters explained the survey, gave fieldwork dates and included a copy of the letter to be sent to householders and the leaflet. A copy of the letter to Local Authority departments is in Appendix 23, and the Police Authority letter is in Appendix 24.

Contact Procedure

- 70. Interviewers were required to complete a contact sheet for every address they were allocated. Even if they failed to make any contact, they were asked to complete the dwelling information and selection parts of the contact sheet, as well as the contact screening section (to screen out inappropriate dwellings) and the neighbourhood contact section (this was completed if interviewers were unable to make contact at the selected address).
- 71. Once the final outcome had been reached, either by a successful interview, refusal, or other outcome, interviewers sent their contact sheet back to Head Office.

Eligibility for Reissues

72. Non contacts and refusals, except for telephone refusals and "hard" (i.e. "do not recontact") refusals were reissued to senior interviewers and supervisors for further evening or weekend calls. A total of 573 interviews were achieved at the reissue stage, representing 7% of the final number of interviews achieved.



Fieldwork Monitoring

- 73. Ipsos MORI was responsible for implementing meticulous fieldwork monitoring procedures. Those used in previous years of the survey were again employed in 2007. This included maximising response rate, and minimising bias response, keeping in mind the requirements set out by the Data Unit on response rates. If respondents were not at the properties, interviewers were requested to call again to try and secure the interview. They were requested to call at least 6 times in an attempt to get a response. These calls included at least one call during the evening and one at the weekend, plus one further evening or weekend call. These calls were required to span a minimum of a three week period. At least 10% of all interviews were back-checked.
- 74. Like the 2005 survey, interviewers were given their addresses in one batch. This means interviewers can work the sample at a steady rate, and fieldwork can be completed earlier than when the sample is issued in batches, such as in 2004. Progress of the survey was monitored by Ipsos MORI not only in the field by Area Managers and supervisors, but also by the e-progress updates from the interviewers and the constant booking-in of all returned contact sheets. There was also a daily update of successful interviews from the CAPI team.
- 75. Ipsos MORI also checked data quality, by checking toplines twice the first was done when at least 50 interviews were completed and the second set of checks was carried out after more than 300 interviews had been returned. On the second round of checking, it was found that the routing was incorrect at TP12 and TP13. This was corrected and an amended script sent out. The data outputs reflect this amendment by including a code at TP13 showing approximately 400 cases where data is missing because individuals were not asked this question due to the routing error.
- 76. TP12 should also have been asked as a single code question, but was programmed as a multicode. This was corrected in the data by changing the multicode answers to single codes, in line with the distribution by Local Authority of the correct single code answers.
- 77. Q97 was asked of everybody who answered Q95 (all households where the owner of the property also lived at the property) but should only have been asked of those who selected codes 1-4 at Q95 (all those who live in and own the property and are the respondent, their partner/spouse, or someone else who lives there with the respondent). Only eight people were incorrectly routed to Q97 from Q95 (cases where someone other then the respondent or their partner/spouse owned and lived in the property). Ipsos MORI identified these eight cases during validation of the data and deleted responses to Q97.

Booking-In System

- 78. The booking-in system was an important element of the survey, as although the e-progress was used for daily monitoring of progress, the booked-in contact sheet was regarded as the 'true' final outcome, over-writing any e-progress outcome already received. It is also the booked-in contact sheet data that provides information for subsequent LiW surveys, for example, the data from the 2004 and 2005 surveys informed decisions about likely Local Authority level response rates for the 2006 survey, and together these informed the 2007 sampling strategy.
- 79. The most important aspect of the booking-in process was to enable reissuing of addresses to take place. It was therefore essential that all booking-in was kept up-to-date at both Ipsos MORI and GfK NOP, to ensure all available contact sheets were ready for reissuing as quickly as possible.
- 80. The requirements for the contact sheet booking-in system are set out in Appendix 25. As the contact sheets were returned to the office they were booked-in by the Field department using the barcode, which was a product of the address number, check digit and household number combined. There were two stages of the booking-in process that are detailed later in the report, with the following data transferred from the contact sheet:
 - Outcome code (including occupied, vacant, second/holiday home and write-in information);
 - Up to 4 refusal codes; and
 - Any address changes.
- 81. Precise details of how the contact sheets were booked-in are provided below.
- 82. Data was automatically updated between GfK NOP and Ipsos MORI every half an hour, which allowed the reports to be updated frequently with accurate data.

Progress Reports

- 83. A detailed progress client report was set up in Excel (see Appendix 26), using links to the main "live" SMS for regular updating. This showed summary outcomes along with detailed progress according to date, sample, region and tenure. The structure was the same as the 2006 report.
- 84. Progress reports were emailed to the Data Unit on a weekly basis.

Fieldwork Queries

- 85. A number of queries were received during fieldwork from interviewers, respondents, and other interested parties (such as Local Authority Housing departments, or the police responding to queries from the public). Most of these were dealt with by Ipsos MORI, although the Data Unit also responded to queries received directly where appropriate.
- 86. The majority of correspondence received from potential respondents was refusals after receiving the advance letter. However, Ipsos MORI also received some queries about how the information from the Household Income section would be used, whether there was a financial incentive for taking part or not, and general information about the purpose of the survey and what was involved.
- 87. The Welsh Assembly also received a few queries directly from respondents checking the legitimacy of the survey.
- 88. GfK NOP interviewers mainly contacted the GfK NOP Research Executives who dealt with their queries or liaised with Ipsos MORI on their behalf.

Sample Address Not Found

- 89. There were some cases where the interviewer was unable to locate a particular address. In these instances, the query was passed to a Research Executive who needed to establish why the address could not be found and search on the Postcode Address File (PAF), streetmap or multimap website. Searches were also carried out on the Valuation Office Agency's (VOA) website to check that the address was listed as residential. The information about other addresses in that particular postcode, or directions to the property, and maps, were then passed on to the interviewer.
- 90. If available, maps were printed out using the ordnance survey grid reference to aid the interviewer.

Respondents Contacting the Office

91. There was a dedicated e-mail address for English e-mails (liw@ipsosmori.com) and one for Welsh (bywcymru@ipsos-mori.com). Likewise, there were two dedicated telephone lines direct to the office, one for English speakers and the other for Welsh speakers. The telephone line for English speakers was manned during office hours, with an answerphone for calls outside these hours. Any messages left were dealt with on the following working day. The telephone line for Welsh speakers was diverted to an answerphone. A Welsh speaking interviewer dialled up the answerphone and translated the message for staff in the Ipsos MORI office. Likewise, emails received in Welsh were replied to in Welsh, once the Welsh speaking interviewer had provided the translation.



92. All contacts about specific addresses were registered on the General Survey Management System (GSMS), and it was noted whether this was by e-mail, fax or telephone. If the reference number had not been included in the correspondence, the address was looked up in the original sample spreadsheet. The action required was then determined. Refusals were recorded directly in the GSMS, including the date and time, method of refusal, any comments, the action taken and who dealt with the refusal. The Field departments were able to access this information directly and run reports, from which they could easily determine which interviewers needed to be informed.

Reason for Contact

- 93. The main types of telephone calls covered:
 - Refusals;
 - Appointments (telephone numbers of respondents were passed onto the relevant interviewer);
 - Questions/queries about the survey; and
 - Verifying the interviewer identity.
- 94. Contact with the Data Unit tended to be refusals for various reasons, or queries. E-mails covered appointments, refusals or withdrawal for other reasons.

Strong Refusals and Complaints

- 95. Ipsos MORI received 87 refusals from households, which were removed from any further stage in the survey.
- 96. One householder contacted Ipsos MORI to complain. Ipsos MORI investigated what had happened when the interviewer had called at the address and sent an apology letter. No further action was required.

Booking-In

97. After being checked to see if they had been worked on fully and correctly coded, contact sheets were booked-in. After initial booking-in, all data was 100% verified by another survey assistant. The booking-in system required explicit confirmation of any discrepancies with the earlier entry.

Batch and Despatch

98. All contact sheets were scanned and the images sent over the internet to Data Liberation. Contact sheets were automatically batched and numbered

- when the scanning was done. Contact sheets tended to be grouped by outcome, so that batches were as consistent as possible.
- 99. Once Data Liberation received the scans, they data processed the results and sent these back to Ipsos MORI, again via the internet.

Sampling

- 100. The random sample was structured, in agreement with the Data Unit, to deliver at least 300 interviews within each Local Authority per year, and as near to 1,000 over 3 years as possible. The overall target was set at 7,480 interviews for 2007.
- 101. Ordnance Survey's AddressPoint was used to improve the accuracy of sample stratification by Local Authority and to provide better locational guidance for rural properties. Although this is mainly derived from PAF (Postcode Address File), it additionally associates a precise grid reference to every address. AddressPoint files for Wales were provided to Ipsos MORI by the Data Unit for use on this project.
- 102. In determining the number of addresses to select, we reviewed previous LiW Survey response rates, and used these as the basis for our estimates about likely response rates in 2007.
- 103. Addresses were selected in January 2007 from AddressPoint by GfK NOP on behalf of Ipsos MORI. In order that we did not remove organisation names where an address might actually be residential for example farms where the farm name was in the organisation field, we left these addresses in the sample frame, but subsequently matched those to the Valuation Office Agency (VOA) address lists. Where we could not make a match within the listed postcode we excluded the address from the sample on the basis that these were almost certainly not residential addresses. An analysis of the response rates achieved at these addresses is given in the Response Rate section, below.
- 104. Unfortunately, in the initial selection of sample, deduping of addresses against 2004, 2005 and 2006 was carried out against the wrong 2006 file. This meant 147 addresses were incorrectly deduped and a corresponding number selected. These were recalled and the correct addresses issued.
- 105. The total number of addresses correctly selected within each Local Authority can also be seen in the Response Rates section, below.

Response Rate Report

Survey Response Outcomes

106. Below follows a series of tables showing survey response outcomes.

Table 3: Overall response rates

Summary Response	Total number n	% of addresses selected	% of addresses issued	% of eligible addresses	% of possible addresses ¹
Selected Addresses	12,754	100.0			
Commercial Properties Not Issued ²	648	5.1			
Issued Sample	12,106	94.9	100.0		
Invalid Addresses	1,181	9.2	9.6		
Suspected 2nd Home/ Holiday Home	16	0.1	0.1		
Confirmed 2nd Home/ Holiday Home	247	1.9	2.0		
Property vacant	629	4.9	5.2		
Property derelict	34	0.3	0.3		
Property demolished	26	0.2	0.2		
Non-residential property	125	1.0	1.0		
Institution only (no private households)	18	0.1	0.1		
Property not found	86	0.7	0.7		
Valid Addresses	10,925	85.6	90.3	100.0	
Non Contact	1,039	8.1	8.6	9.6	9.9
Some contact, but no interview	306	2.4	2.5	2.8	2.9
Occupier in not answering door	94	0.7	0.8	0.9	0.9
Occupied, but no contact	566	4.4	4.7	5.2	5.4
Unsure if occupied, no contact	73	0.6	0.6	0.7	-
Refusals	1,861	14.6	15.3	17.1	17.8
Refused before screening	1,310	10.3	10.8	12.0	12.5
Refused after screening	447	3.5	3.7	4.1	4.3
Entry to block refused by warden etc	17	0.1	0.1	0.2	0.2
Refusals to Head Office	87	0.7	0.7	0.8	-
Other	297	2.3	2.6	2.7	2.8
Too ill to participate	176	1.4	1.5	1.6	-
Away during fieldwork	79	0.6	0.7	0.7	-
Unable to speak English/Welsh	19	0.1	0.2	0.2	-
Other	23	0.2	0.2	0.2	-
Successful Interviews ³	7,728	60.6	63.8	70.7	73.8
				Source:	Ipsos MORI

¹ Possible addresses refers to occupied addresses where an interview could have been conducted

Ipsos MORI

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⁻ i.e. all occupied non-contacts and face-to-face refusals

² These were identified by removing all addresses featuring an organisation name unless these could be matched by postcode to an entry on the residential council tax valuations list

 $^{^3}$ This excludes the interviews conducted at additional households identified during screening, as detailed at paragraph 103

Table 4: Number of calls taken to achieve an interview

	% of	total
Number of calls	interviews	
1		29%
2		22%
3		15%
4		11%
5		7%
6		5%
7		3%
8		2%
9		2%
10 or more		5%
	Source: Ipsos	MORI

Table 5: Pattern of Interviews across the year, by Local Authority

Number of interviews per Local Authority by Month of Interview							
			Mon	th			Total
Local Authority	Mar	Apr	May	June	July	Aug	
Blaenau Gwent	83	116	144	29	17	0	389
Bridgend	98	90	102	76	26	2	394
Caerphilly	49	88	113	51	11	0	312
Cardiff	81	97	84	26	17	0	305
Carmarthenshire	82	135	104	14	1	1	337
Ceredigion	100	119	83	50	14	0	366
Conwy	69	103	119	53	20	1	365
Denbighshire	42	156	117	43	7	0	365
Flintshire	77	107	71	61	26	0	342
Gwynedd	43	94	127	73	21	2	360
Isle of Anglesey	39	99	140	59	11	0	348
Merthyr Tydfil	54	88	72	77	54	0	345
Monmouthshire	74	140	126	30	8	0	378
Neath Port Talbot	39	96	126	54	33	5	353
Newport	90	82	61	69	18	0	320
Pembrokeshire	50	124	94	65	23	1	357
Powys	59	113	91	63	56	3	385
Rhondda Cynon Taf	64	71	121	68	13	2	339
Swansea	48	78	136	57	15	1	335
Torfaen	23	103	141	54	13	5	339
Vale of Glamorgan	82	107	84	32	6	0	311
Wrexham	59	127	126	51	16	4	383
Total ⁴	1,405	2,333	2,382	1,155	426	27	7,728
Source: Ipsos MORI							

 $^{\rm 4}$ This excludes the interviews conducted at additional households identified during screening, as detailed at paragraph 103

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Table 6: Response rates by Local Authority (n)

Local Authority by Summary Outcome

		Summary Outcome (Numbers)					
	Successful		No				
Local Authority	interview	Refused	contact	Ineligible	Other		
Blaenau Gwent	389	65	42	56	14	566	
Bridgend	394	81	50	42	13	580	
Caerphilly	312	71	34	27	11	455	
Cardiff	305	54	58	35	8	460	
Carmarthenshire	337	91	23	41	9	501	
Ceredigion	366	83	56	71	12	588	
Conwy	365	112	71	68	18	634	
Denbighshire	365	100	63	74	26	628	
Flintshire	342	115	44	42	6	549	
Gwynedd	360	79	64	118	23	644	
Isle of Anglesey	348	99	34	89	14	584	
Merthyr Tydfil	345	79	53	45	16	538	
Monmouthshire	378	73	23	40	10	524	
Neath Port Talbot	353	84	43	49	12	541	
Newport	320	104	51	46	13	534	
Pembrokeshire	357	76	40	86	15	574	
Powys	385	62	41	60	15	563	
Rhondda Cynon Taf	339	60	41	26	9	475	
Swansea	335	90	60	36	12	533	
Torfaen	311	94	33	27	13	478	
Vale of Glamorgan	339	83	68	37	11	538	
Wrexham	383	106	63	50	17	619	
Total ⁵	7,728	1,861	1,055	1,165	297	12,106	
Source: Ipsos M							

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 $^{^{\}rm 5}$ This excludes the interviews conducted at additional households identified during screening, as detailed at paragraph 103

Table 7: Response rates by Local Authority
(%)

Local Authority by Summary Outcome

	Sur		Total			
	Successful	•	No	<u> </u>		
Local Authority	interview	Refused	contact	Ineligible	Other	
Blaenau Gwent	68.7	11.5	7.4	9.9	2.5	100.0
Bridgend	67.9	14.0	8.6	7.2	2.2	100.0
Caerphilly	68.6	15.6	7.5	5.9	2.4	100.0
Cardiff	66.3	11.7	12.6	7.6	1.7	100.0
Carmarthenshire	67.3	18.2	4.6	8.2	1.8	100.0
Ceredigion	62.2	14.1	9.5	12.1	2.0	100.0
Conwy	57.6	17.7	11.2	10.7	2.8	100.0
Denbighshire	58.1	15.9	10.0	11.8	4.1	100.0
Flintshire	62.3	20.9	8.0	7.7	1.1	100.0
Gwynedd	55.9	12.3	9.9	18.3	3.6	100.0
Isle of Anglesey	59.6	17.0	5.8	15.2	2.4	100.0
Merthyr Tydfil	64.1	14.7	9.9	8.4	3.0	100.0
Monmouthshire	72.1	13.9	4.4	7.6	1.9	100.0
Neath Port Talbot	65.2	15.5	7.9	9.1	2.2	100.0
Newport	59.9	19.5	9.6	8.6	2.4	100.0
Pembrokeshire	62.2	13.2	7.0	15.0	2.6	100.0
Powys	68.4	11.0	7.3	10.7	2.7	100.0
Rhondda Cynon Taf	71.4	12.6	8.6	5.5	1.9	100.0
Swansea	62.9	16.9	11.3	6.8	2.3	100.0
Torfaen	65.1	19.7	6.9	5.6	2.7	100.0
Vale of Glamorgan	63.0	15.4	12.6	6.9	2.0	100.0
Wrexham	61.9	17.1	10.2	8.1	2.7	100.0
Total ⁶	63.8	15.4	8.7	9.6	2.5	100.0
					Source: Ips	
					Source. 1ps	os mon

 6 This excludes the interviews conducted at additional households identified during screening, as detailed at paragraph $103\,$

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Table 8: Urban/rural classification by summary outcome (n)

Urban/rural classification combined by Summary Outcome						
	Su	mmary O	utcome (Numbers)		Total
Urban/rural classification combined	Successful interview	Refused	No contact	Ineligible	Other	
Urban >10k – Sparse	197	53	30	30	8	318
Town and Fringe - Sparse	326	92	75	94	16	603
Village - Sparse	551	118	40	161	16	886
Hamlet & Isolated Dwelling - Sparse	417	67	35	94	18	631
Urban >10k – Less Sparse	4,325	1,079	632	528	168	6,732
Town and Fringe – Less Sparse	1,073	259	162	139	46	1,679
Village – Less Sparse	578	134	59	72	10	853
Hamlet & Isolated Dwelling – Less Sparse	261	59	22	47	15	404
Total ⁷	7,728	1,861	1,055	1,165	297	12,106
					Source: I	bsos MORI

Table 9: Urban/rural classification by summary outcome (%)

Urban/rural classification combined by Summary Outcome						
	Summary Outcome (Percentages)					Total
Urban/rural classification combined	Successful interview	Refused	No contact	Ineligible	Other	
	11101 / 10 //	11014004	001111101	11101181010	O CITO	
Urban >10k − Sparse	61.9	16.7	9.4	9.4	2.5	100.0
Town and Fringe - Sparse	54.1	15.3	12.4	15.6	2.7	100.0
Village - Sparse	62.2	13.3	4.5	18.2	1.8	100.0
Hamlet & Isolated Dwelling	66.1	10.6	5.5	14.9	2.9	100.0
- Sparse						
Urban >10k – Less Sparse	64.2	16.0	9.4	7.8	2.5	100.0
Town and Fringe – Less	63.9	15.4	9.6	8.3	2.7	100.0
Sparse						
Village – Less Sparse	67.8	15.7	6.9	8.4	1.2	100.0
Hamlet & Isolated Dwelling	64.6	14.6	5.4	11.6	3.7	100.0
Less Sparse						
Total ⁸	63.8	15.4	8.7	9.6	2.5	100.0
Source: Ipsos MORI						bsos MORI

 $^{^{7}}$ This excludes the interviews conducted at additional households identified during screening, as detailed at paragraph $103\,$

 $^{^8}$ This excludes the interviews conducted at additional households identified during screening, as detailed at paragraph $103\,$

Multiple flats/household at addresses

107. Where multiple flats or households were found at an address, interviewers were instructed to complete additional contact sheets as necessary and attempt to interview up to three households in total. A total of 36 additional dwellings were found: additional flats were found at 13 addresses, additional houses at 21 addresses, and two were coded as 'other' property type. Five addresses had more than one household.

Table 10: Combined number of flats

Combined number of flats			
	Frequency	Percent	Cumulative Percent
0	1,829	14.3	14.3
1	10,889	85.4	99.7
2	20	0.2	99.9
3	13	0.1	100.0
4	1	0.0	100.0
8	1	0.0	100.0
9	1	0.0	100.0
Total	12,754	100.0	100.0
			Source: Ipsos MORI

108. Addresses where there were '0' households were either business addresses or invalid addresses (such as derelict, vacant, demolished, non-residential addresses, holiday homes and properties that could not be found). There were 1,922 addresses where there were 0 households.

Interviewer Response Rate

109. The following table shows the response rate for each interviewer. However, those achieving 3 interviews or less have been excluded, as have addresses where there is no interviewer allocation (such as the invalid business addresses).

Table 11: Response Rate by Interviewer

	Issued	Successful		No		
Company	addresses	Interview	Refused	contact	Ineligible	Other
-	No.	0/0	0/0	%	0/0	%
IM1	59	72.9	11.9	5.1	10.2	0.0
IM2	5	80.0	0.0	0.0	20.0	0.0
IM3	124	61.3	17.7	11.3	8.1	1.6
IM4	78	60.3	16.7	11.5	9.0	2.6
IM5	63	66.7	19.0	1.6	12.7	0.0
IM6	117	58.1	12.0	8.5	14.5	6.8
IM7	109	67.0	14.7	7.3	10.1	0.9
IM8	66	68.2	10.6	13.6	6.1	1.5
IM9	21	66.7	19.0	14.3	0.0	0.0
IM10	95	82.1	8.4	7.4	1.1	1.1
IM11	22	77.3	9.1	4.5	4.5	4.5
IM12	76	53.9	23.7	5.3	14.5	2.6
IM13	108	84.3	1.9	6.5	7.4	0.0
IM14	21	85.7	0.0	0.0	14.3	0.0
IM15	76	64.5	10.5	3.9	19.7	1.3
IM16	77	70.1	9.1	3.9	16.9	0.0
IM17	73	74.0	15.1	5.5	4.1	1.4
IM18	231	77.1	5.6	7.8	8.2	1.3
IM19	83	56.6	10.8	15.7	14.5	2.4
IM20	94	71.3	18.1	0.0	9.6	1.1
IM21	54	46.3	22.2	16.7	14.8	0.0
IM22	59	78.0	6.8	6.8	6.8	1.7
IM23	48	47.9	18.8	12.5	14.6	6.3
IM24	98	70.4	11.2	8.2	8.2	2.0
IM25	118	66.9	11.9	8.5	9.3	3.4
IM26	55	81.8	5.5	3.6	9.1	0.0
IM27	11	54.5	0.0	45.5	0.0	0.0
IM28	108	81.5	9.3	3.7	3.7	1.9
IM29	55	52.7	25.5	18.2	3.6	0.0
IM30	49	65.3	10.2	14.3	8.2	2.0
IM31	108	66.7	7.4	19.4	3.7	2.8
IM32	181	79.6	6.6	7.7	5.0	1.1
IM33	53	66.0	24.5	0.0	7.5	1.9
IM34	107	62.6	18.7	14.0	3.7	0.9
IM35	23	52.2	26.1	4.3	17.4	0.0
IM36	56	60.7	3.6	26.8	8.9	0.0
IM37	43	62.8	23.3	7.0	4.7	2.3
IM38	34	61.8	20.6	2.9	14.7	0.0
IM39	127	52.8	27.6	11.8	7.1	0.8
IM40	60	53.3	16.7	11.7	15.0	3.3
IM41	98	53.1	17.3	24.5	3.1	2.0
IM42	66	51.5	25.8	21.2	0.0	1.5
IM43	170	75.3	9.4	8.2	5.9	1.2
IM43 IM44	97	68.0	14.4	3.1	14.4	0.0
IM44 IM45	52	75.0	19.2	1.9	3.8	0.0
IM45 IM46	93	41.9	22.6	9.7	21.5	4.3
IM46 IM47	39	74.4	22.6	12.8	21.5 7.7	2.6
IM47 IM48	56			7.1		0.0
IM48 IM49	213	66.1 51.2	12.5 15.0	22.5	14.3 8.5	2.8

1 7		Issued	Successful		No		
IM50	Company	addresses				Ineligible	Other
IM51			0/0	0/0		%	%
IM52	IM50	37	56.8	13.5	5.4	18.9	5.4
IM53	IM51	19	68.4	10.5	0.0	21.1	0.0
IM54	IM52	185	62.2	19.5	6.5	4.9	7.0
IM55 152 68.4 19.7 0.7 8.6 IM56 76 57.9 23.7 6.6 9.2 IM57 29 44.8 27.6 10.3 10.3 IM58 82 43.9 6.1 20.7 23.2 IM59 19 78.9 10.5 0.0 5.3 IM60 82 64.6 20.7 4.9 7.3 IM60 44 47.7 20.5 20.5 9.1 IM62 32 62.5 3.1 15.6 18.8 IM63 91 58.2 19.8 12.1 8.8 IM64 41 46.3 2.4 22.0 29.3 IM65 63 71.4 12.7 6.3 9.5 IM66 66 60.6 60.6 13.6 16.7 9.1 IM67 43 58.1 14.0 11.6 14.0 IM70 57 56.1 12.3	IM53	133	68.4	12.8	5.3	12.8	0.8
IM56 76 57.9 23.7 6.6 9.2 IM57 29 44.8 27.6 10.3 10.3 IM58 82 43.9 6.1 20.7 23.2 IM59 19 78.9 10.5 0.0 5.3 IM60 82 64.6 20.7 4.9 7.3 IM61 44 47.7 20.5 20.5 9.1 IM62 32 62.5 3.1 15.6 18.8 IM63 91 58.2 19.8 12.1 8.8 IM63 91 58.2 19.8 12.1 8.8 IM64 41 46.3 2.4 22.0 29.3 IM65 63 71.4 12.7 6.3 9.5 IM66 66 60.6 60.6 13.6 16.7 9.1 IM67 43 58.1 14.0 11.6 14.0 IM69 113 77.0 10.6	IM54	68	70.6	10.3	4.4	14.7	0.0
IM57	IM55	152	68.4	19.7	0.7	8.6	2.6
IM58 82 43.9 6.1 20.7 23.2 IM59 19 78.9 10.5 0.0 5.3 IM60 82 64.6 20.7 4.9 7.3 IM61 44 47.7 20.5 20.5 9.1 IM62 32 62.5 3.1 15.6 18.8 IM63 91 58.2 19.8 12.1 8.8 IM63 91 58.2 19.8 12.1 8.8 IM64 41 46.3 2.4 22.0 29.3 IM65 63 71.4 12.7 6.3 9.5 IM66 66 60.6 13.6 16.7 9.1 IM67 43 58.1 14.0 11.6 14.0 IM68 63 73.0 17.5 1.6 4.8 IM69 113 77.0 10.6 8.0 4.4 IM70 57 56.1 12.3 10.5	IM56	76	57.9	23.7	6.6	9.2	2.6
IM59 19 78.9 10.5 0.0 5.3 IM60 82 64.6 20.7 4.9 7.3 IM61 44 47.7 20.5 20.5 9.1 IM62 32 62.5 3.1 15.6 18.8 IM63 91 58.2 19.8 12.1 8.8 IM64 41 46.3 2.4 22.0 29.3 IM65 63 71.4 12.7 6.3 9.5 IM66 66 60.6 13.6 16.7 9.1 IM67 43 58.1 14.0 11.6 14.0 IM68 63 73.0 17.5 1.6 4.8 IM69 113 77.0 10.6 8.0 4.4 IM70 57 56.1 12.3 10.5 21.1 IM71 74 63.5 21.6 2.7 9.5 IM72 117 58.1 17.1 8.5	IM57	29	44.8	27.6	10.3	10.3	6.9
IM60 82 64.6 20.7 4.9 7.3 IM61 44 47.7 20.5 20.5 9.1 IM62 32 62.5 3.1 15.6 18.8 IM63 91 58.2 19.8 12.1 8.8 IM64 41 46.3 2.4 22.0 29.3 IM65 63 71.4 12.7 6.3 9.5 IM66 66 66 60.6 13.6 16.7 9.1 IM67 43 58.1 14.0 11.6 14.0 IM68 63 73.0 17.5 1.6 4.8 IM69 113 77.0 10.6 8.0 4.4 IM70 57 56.1 12.3 10.5 21.1 IM71 74 63.5 21.6 2.7 9.5 IM72 117 58.1 17.1 8.5 14.5 IM73 54 33.3 24.1	IM58	82	43.9	6.1	20.7	23.2	6.1
IM61 44 47.7 20.5 20.5 9.1 IM62 32 62.5 3.1 15.6 18.8 IM63 91 58.2 19.8 12.1 8.8 IM64 41 46.3 2.4 22.0 29.3 IM65 63 71.4 12.7 6.3 9.5 IM66 66 66 60.6 13.6 16.7 9.1 IM67 43 58.1 14.0 11.6 14.0 IM68 63 73.0 17.5 1.6 4.8 IM69 113 77.0 10.6 8.0 4.4 IM70 57 56.1 12.3 10.5 21.1 IM71 74 63.5 21.6 2.7 9.5 IM72 117 58.1 17.1 8.5 14.5 IM73 54 33.3 24.1 29.6 9.3 IM74 60 58.3 25.0	IM59	19	78.9	10.5	0.0	5.3	5.3
IM62 32 62.5 3.1 15.6 18.8 IM63 91 58.2 19.8 12.1 8.8 IM64 41 46.3 2.4 22.0 29.3 IM65 63 71.4 12.7 6.3 9.5 IM66 66 60.6 13.6 16.7 9.1 IM67 43 58.1 14.0 11.6 14.0 IM68 63 73.0 17.5 1.6 4.8 IM69 113 77.0 10.6 8.0 4.4 IM70 57 56.1 12.3 10.5 21.1 IM71 74 63.5 21.6 2.7 9.5 IM72 117 58.1 17.1 8.5 14.5 IM73 54 33.3 24.1 29.6 9.3 IM74 60 58.3 25.0 6.7 8.3 IM75 108 63.0 24.1 1.9	IM60	82	64.6	20.7	4.9	7.3	2.4
IM63 91 58.2 19.8 12.1 8.8 IM64 41 46.3 2.4 22.0 29.3 IM65 63 71.4 12.7 6.3 9.5 IM66 66 60.6 13.6 16.7 9.1 IM67 43 58.1 14.0 11.6 14.0 IM68 63 73.0 17.5 1.6 4.8 IM69 113 77.0 10.6 8.0 4.4 IM70 57 56.1 12.3 10.5 21.1 IM71 74 63.5 21.6 2.7 9.5 IM72 117 58.1 17.1 8.5 14.5 IM73 54 33.3 24.1 29.6 9.3 IM74 60 58.3 25.0 6.7 8.3 IM75 108 63.0 24.1 1.9 9.3 IM75 108 63.0 24.1 1.9	IM61	44	47.7	20.5	20.5	9.1	2.3
IM64 41 46.3 2.4 22.0 29.3 IM65 63 71.4 12.7 6.3 9.5 IM66 66 60.6 13.6 16.7 9.1 IM67 43 58.1 14.0 11.6 14.0 IM68 63 73.0 17.5 1.6 4.8 IM69 113 77.0 10.6 8.0 4.4 IM70 57 56.1 12.3 10.5 21.1 IM71 74 63.5 21.6 2.7 9.5 IM72 117 58.1 17.1 8.5 14.5 IM73 54 33.3 24.1 29.6 9.3 IM74 60 58.3 25.0 6.7 8.3 IM75 108 63.0 24.1 1.9 9.3 IM75 108 63.0 24.1 1.9 9.3 IM77 38 44.7 23.7 21.1	IM62	32	62.5	3.1	15.6	18.8	0.0
IM64 41 46.3 2.4 22.0 29.3 IM65 63 71.4 12.7 6.3 9.5 IM66 66 66 60.6 13.6 16.7 9.1 IM67 43 58.1 14.0 11.6 14.0 IM68 63 73.0 17.5 1.6 4.8 IM69 113 77.0 10.6 8.0 4.4 IM70 57 56.1 12.3 10.5 21.1 IM71 74 63.5 21.6 2.7 9.5 IM72 117 58.1 17.1 8.5 14.5 IM73 54 33.3 24.1 29.6 9.3 IM74 60 58.3 25.0 6.7 8.3 IM75 108 63.0 24.1 1.9 9.3 IM75 108 63.0 24.1 1.9 9.3 IM77 38 44.7 23.7	IM63	91	58.2	19.8	12.1	8.8	1.1
IM66 66 60.6 13.6 16.7 9.1 IM67 43 58.1 14.0 11.6 14.0 IM68 63 73.0 17.5 1.6 4.8 IM69 113 77.0 10.6 8.0 4.4 IM70 57 56.1 12.3 10.5 21.1 IM71 74 63.5 21.6 2.7 9.5 IM72 117 58.1 17.1 8.5 14.5 IM73 54 33.3 24.1 29.6 9.3 IM74 60 58.3 25.0 6.7 8.3 IM75 108 63.0 24.1 1.9 9.3 IM75 108 63.0 24.1 1.9 9.3 IM75 108 63.0 24.1 1.9 9.3 IM77 38 44.7 23.7 21.1 7.9 IM78 7 57.1 28.6 0.0	IM64	41	46.3	2.4	22.0	29.3	0.0
IM67 43 58.1 14.0 11.6 14.0 IM68 63 73.0 17.5 1.6 4.8 IM69 113 77.0 10.6 8.0 4.4 IM70 57 56.1 12.3 10.5 21.1 IM71 74 63.5 21.6 2.7 9.5 IM72 117 58.1 17.1 8.5 14.5 IM73 54 33.3 24.1 29.6 9.3 IM74 60 58.3 25.0 6.7 8.3 IM75 108 63.0 24.1 1.9 9.3 IM76 34 67.6 26.5 2.9 2.9 IM77 38 44.7 23.7 21.1 7.9 IM78 7 57.1 28.6 0.0 14.3 IM79 34 70.6 14.7 5.9 8.8 IM80 88 79.5 9.1 6.8		63		12.7		9.5	0.0
IM67 43 58.1 14.0 11.6 14.0 IM68 63 73.0 17.5 1.6 4.8 IM69 113 77.0 10.6 8.0 4.4 IM70 57 56.1 12.3 10.5 21.1 IM71 74 63.5 21.6 2.7 9.5 IM72 117 58.1 17.1 8.5 14.5 IM73 54 33.3 24.1 29.6 9.3 IM74 60 58.3 25.0 6.7 8.3 IM75 108 63.0 24.1 1.9 9.3 IM76 34 67.6 26.5 2.9 2.9 IM77 38 44.7 23.7 21.1 7.9 IM78 7 57.1 28.6 0.0 14.3 IM79 34 70.6 14.7 5.9 8.8 IM80 88 79.5 9.1 6.8	IM66	66	60.6	13.6	16.7	9.1	0.0
IM68 63 73.0 17.5 1.6 4.8 IM69 113 77.0 10.6 8.0 4.4 IM70 57 56.1 12.3 10.5 21.1 IM71 74 63.5 21.6 2.7 9.5 IM72 117 58.1 17.1 8.5 14.5 IM73 54 33.3 24.1 29.6 9.3 IM74 60 58.3 25.0 6.7 8.3 IM75 108 63.0 24.1 1.9 9.3 IM76 34 67.6 26.5 2.9 2.9 IM77 38 44.7 23.7 21.1 7.9 IM78 7 57.1 28.6 0.0 14.3 IM79 34 70.6 14.7 5.9 8.8 IM80 88 79.5 9.1 6.8 4.5 IM81 16 68.8 6.3 12.5 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>2.3</td></t<>							2.3
IM69 113 77.0 10.6 8.0 4.4 IM70 57 56.1 12.3 10.5 21.1 IM71 74 63.5 21.6 2.7 9.5 IM72 117 58.1 17.1 8.5 14.5 IM73 54 33.3 24.1 29.6 9.3 IM74 60 58.3 25.0 6.7 8.3 IM75 108 63.0 24.1 1.9 9.3 IM76 34 67.6 26.5 2.9 2.9 IM77 38 44.7 23.7 21.1 7.9 IM78 7 57.1 28.6 0.0 14.3 IM79 34 70.6 14.7 5.9 8.8 IM80 88 79.5 9.1 6.8 4.5 IM81 61.7 11.1 17.3 6.2 GN1 81 61.7 11.1 17.3 6.2 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3.2</td>							3.2
IM70 57 56.1 12.3 10.5 21.1 IM71 74 63.5 21.6 2.7 9.5 IM72 117 58.1 17.1 8.5 14.5 IM73 54 33.3 24.1 29.6 9.3 IM74 60 58.3 25.0 6.7 8.3 IM75 108 63.0 24.1 1.9 9.3 IM76 34 67.6 26.5 2.9 2.9 IM77 38 44.7 23.7 21.1 7.9 IM78 7 57.1 28.6 0.0 14.3 IM79 34 70.6 14.7 5.9 8.8 IM80 88 79.5 9.1 6.8 4.5 IM81 16 68.8 6.3 12.5 12.5 GN1 81 61.7 11.1 17.3 6.2 GN2 48 66.7 16.7 2.1 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>0.0</td></td<>							0.0
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IM72 117 58.1 17.1 8.5 14.5 IM73 54 33.3 24.1 29.6 9.3 IM74 60 58.3 25.0 6.7 8.3 IM75 108 63.0 24.1 1.9 9.3 IM76 34 67.6 26.5 2.9 2.9 IM77 38 44.7 23.7 21.1 7.9 IM78 7 57.1 28.6 0.0 14.3 IM79 34 70.6 14.7 5.9 8.8 IM80 88 79.5 9.1 6.8 4.5 IM81 16 68.8 6.3 12.5 12.5 GN1 81 61.7 11.1 17.3 6.2 GN2 48 66.7 16.7 2.1 14.6 GN3 72 62.5 18.1 5.6 11.1 GN4 85 60.0 16.5 7.1 1							2.7
IM73 54 33.3 24.1 29.6 9.3 IM74 60 58.3 25.0 6.7 8.3 IM75 108 63.0 24.1 1.9 9.3 IM76 34 67.6 26.5 2.9 2.9 IM77 38 44.7 23.7 21.1 7.9 IM78 7 57.1 28.6 0.0 14.3 IM79 34 70.6 14.7 5.9 8.8 IM80 88 79.5 9.1 6.8 4.5 IM81 16 68.8 6.3 12.5 12.5 GN1 81 61.7 11.1 17.3 6.2 GN2 48 66.7 16.7 2.1 14.6 GN3 72 62.5 18.1 5.6 11.1 GN4 85 60.0 16.5 7.1 10.6 GN5 31 58.1 16.1 0.0 19.							1.7
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IM79 34 70.6 14.7 5.9 8.8 IM80 88 79.5 9.1 6.8 4.5 IM81 16 68.8 6.3 12.5 12.5 GN1 81 61.7 11.1 17.3 6.2 GN2 48 66.7 16.7 2.1 14.6 GN3 72 62.5 18.1 5.6 11.1 GN4 85 60.0 16.5 7.1 10.6 GN5 31 58.1 16.1 0.0 19.4 GN6 98 69.4 15.3 8.2 5.1 GN7 68 72.1 13.2 2.9 7.4 GN8 110 61.8 18.2 11.8 8.2 GN9 46 65.2 17.4 4.3 10.9 GN10 128 57.8 21.1 9.4 9.4 GN11 86 61.6 17.4 4.7 10.5<							0.0
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GN3 72 62.5 18.1 5.6 11.1 GN4 85 60.0 16.5 7.1 10.6 GN5 31 58.1 16.1 0.0 19.4 GN6 98 69.4 15.3 8.2 5.1 GN7 68 72.1 13.2 2.9 7.4 GN8 110 61.8 18.2 11.8 8.2 GN9 46 65.2 17.4 4.3 10.9 GN10 128 57.8 21.1 9.4 9.4 GN11 86 61.6 17.4 4.7 10.5 GN12 75 62.7 18.7 9.3 8.0 GN13 122 73.0 9.0 10.7 5.7 GN14 56 60.7 17.9 3.6 12.5 GN15 75 68.0 10.7 5.3 8.0							0.0
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GN5 31 58.1 16.1 0.0 19.4 GN6 98 69.4 15.3 8.2 5.1 GN7 68 72.1 13.2 2.9 7.4 GN8 110 61.8 18.2 11.8 8.2 GN9 46 65.2 17.4 4.3 10.9 GN10 128 57.8 21.1 9.4 9.4 GN11 86 61.6 17.4 4.7 10.5 GN12 75 62.7 18.7 9.3 8.0 GN13 122 73.0 9.0 10.7 5.7 GN14 56 60.7 17.9 3.6 12.5 GN15 75 68.0 10.7 5.3 8.0							5.9
GN6 98 69.4 15.3 8.2 5.1 GN7 68 72.1 13.2 2.9 7.4 GN8 110 61.8 18.2 11.8 8.2 GN9 46 65.2 17.4 4.3 10.9 GN10 128 57.8 21.1 9.4 9.4 GN11 86 61.6 17.4 4.7 10.5 GN12 75 62.7 18.7 9.3 8.0 GN13 122 73.0 9.0 10.7 5.7 GN14 56 60.7 17.9 3.6 12.5 GN15 75 68.0 10.7 5.3 8.0							6.5
GN7 68 72.1 13.2 2.9 7.4 GN8 110 61.8 18.2 11.8 8.2 GN9 46 65.2 17.4 4.3 10.9 GN10 128 57.8 21.1 9.4 9.4 GN11 86 61.6 17.4 4.7 10.5 GN12 75 62.7 18.7 9.3 8.0 GN13 122 73.0 9.0 10.7 5.7 GN14 56 60.7 17.9 3.6 12.5 GN15 75 68.0 10.7 5.3 8.0							2.0
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GN9 46 65.2 17.4 4.3 10.9 GN10 128 57.8 21.1 9.4 9.4 GN11 86 61.6 17.4 4.7 10.5 GN12 75 62.7 18.7 9.3 8.0 GN13 122 73.0 9.0 10.7 5.7 GN14 56 60.7 17.9 3.6 12.5 GN15 75 68.0 10.7 5.3 8.0							0.0
GN10 128 57.8 21.1 9.4 9.4 GN11 86 61.6 17.4 4.7 10.5 GN12 75 62.7 18.7 9.3 8.0 GN13 122 73.0 9.0 10.7 5.7 GN14 56 60.7 17.9 3.6 12.5 GN15 75 68.0 10.7 5.3 8.0							2.2
GN11 86 61.6 17.4 4.7 10.5 GN12 75 62.7 18.7 9.3 8.0 GN13 122 73.0 9.0 10.7 5.7 GN14 56 60.7 17.9 3.6 12.5 GN15 75 68.0 10.7 5.3 8.0							2.3
GN12 75 62.7 18.7 9.3 8.0 GN13 122 73.0 9.0 10.7 5.7 GN14 56 60.7 17.9 3.6 12.5 GN15 75 68.0 10.7 5.3 8.0							5.8
GN13 122 73.0 9.0 10.7 5.7 GN14 56 60.7 17.9 3.6 12.5 GN15 75 68.0 10.7 5.3 8.0							1.3
GN14 56 60.7 17.9 3.6 12.5 GN15 75 68.0 10.7 5.3 8.0							1.6
GN15 75 68.0 10.7 5.3 8.0							5.4
							8.0
0.110 100 0.1 10.0 7.1 10.7							1.0
GN17 56 57.1 25.0 10.7 5.4							1.8
GN17 36 37.1 23.0 10.7 3.4 GN18 90 65.6 24.4 3.3 6.7							0.0
GN19 80 60.0 20.0 7.5 10.0							2.5

	Issued	Successful	D 4 1	No	T 11 11 1	0.1
Company	addresses	Interview	Refused	contact	Ineligible	Other
CNIO	No.	0/0	0/0	0/0	9/0	9/0
GN20	106	64.2	11.3	9.4	12.3	2.8
GN21	165	69.7 64.3	10.9	8.5 8.9	6.7 2.7	4.2
GN22	112		20.5			3.6
GN23	87	69.0	10.3	8.0	10.3	2.3
GN24	49	59.2	18.4	10.2	4.1	8.2
GN25	100	75.0	17.0	3.0	5.0	0.0
GN26	114	66.7	14.0	7.9	6.1	5.3
GN27	61	60.7	19.7	8.2	8.2	3.3
GN28	224	71.4	9.4	7.6	9.4	2.2
GN29	48	64.6	14.6	2.1	18.8	0.0
GN30	54 70	64.8	5.6	11.1	16.7	1.9
GN31	70	44.3	17.1	4.3	28.6	5.7
GN32	108	59.3	18.5	10.2	10.2	1.9
GN33	42	47.6	14.3	2.4	33.3	2.4
GN34	55	61.8	14.5	9.1	14.5	0.0
GN35	95	68.4	22.1	3.2	4.2	2.1
GN36	82	46.3	12.2	11.0	23.2	7.3
GN37	83	65.1	7.2	3.6	21.7	2.4
GN38	46	60.9	15.2	6.5	13.0	4.3
GN39	76	60.5	14.5	9.2	10.5	5.3
GN40	66	56.1	24.2	6.1	10.6	3.0
GN41	21	38.1	42.9	4.8	14.3	0.0
GN42	17	52.9	23.5	0.0	11.8	11.8
GN43	22	50.0	40.9	0.0	9.1	0.0
GN44	62	45.2	25.8	11.3	9.7	8.1
GN45	61	55.7	16.4	8.2	16.4	3.3
GN46	29	65.5	17.2	3.4	6.9	6.9
GN47	120	63.3	21.7	8.3	3.3	3.3
GN48	95	49.5	15.8	14.7	12.6	7.4
GN49	96	84.4	6.3	2.1	7.3	0.0
GN50	86	59.3	18.6	9.3	9.3	3.5
GN51	13	61.5	30.8	0.0	7.7	0.0
GN52	80	72.5	11.3	8.8	7.5	0.0
GN53	77	74.0	6.5	7.8	10.4	1.3
GN54	40	72.5	7.5	12.5	2.5	5.0
GN55	72	59.7	16.7	6.9	15.3	1.4
GN56	67	61.2	16.4	9.0	9.0	4.5
GN57	10	50.0	20.0	0.0	30.0	0.0
GN58	39	71.8	7.7	12.8	7.7	0.0
GN59	99	58.6	5.1	25.3	8.1	3.0
GN60	100	60.0	14.0	12.0	9.0	5.0
GN61	51	62.7	21.6	7.8	7.8	0.0
GN62	49	59.2	10.2	0.0	26.5	4.1
GN63	44	59.1	20.5	9.1	11.4	0.0
GN64	111	78.4	10.8	4.5	4.5	1.8
GN65	58	77.6	12.1	1.7	6.9	1.7
GN66	58	67.2	22.4	3.4	5.2	1.7
GN67	48	58.3	27.1	2.1	10.4	2.1
GN68	23	52.2	43.5	0.0	4.3	0.0
GN69	48	62.5	25.0	4.2	6.3	2.1
GN70	77	67.5	18.2	5.2	6.5	2.6

	Issued	Successful		No		
Company	addresses	Interview	Refused	contact	Ineligible	Other
	No.	%	%	%	%	%
GN71	96	66.7	13.5	6.3	13.5	0.0
GN72	51	66.7	25.5	0.0	5.9	2.0
GN73	100	75.0	7.0	9.0	7.0	2.0
GN74	46	47.8	26.1	0.0	17.4	8.7
GN75	104	58.7	16.3	14.4	7.7	2.9
GN76	61	49.2	21.3	8.2	16.4	4.9
GN77	94	42.6	19.1	13.8	19.1	5.3
GN78	63	58.7	19.0	3.2	17.5	1.6
GN79	64	79.7	12.5	0.0	6.3	1.6
GN80	44	45.5	20.5	2.3	27.3	4.5
GN81	91	47.3	27.5	12.1	11.0	2.2
GN82	104	55.8	20.2	8.7	6.7	8.7

Data Entry, Validation and Output

Coding

110. Coding of Household Reference Person (HRP) and Spouse SIC and SOC categories (using 2002 classification) was conducted during the autumn by Ipsos MORI Data Services using the automated CASCOT programme. NS-SEC codes were generated from the SOC outcome codes using SPSS syntax.

Validation and Editing

- 111. The list of post-survey data validations were specified by Ipsos MORI and agreed by the Data Unit. These replicated all hard and soft checks from the CAPI interview, as well as adding a small number of extra checks. The complete specification is contained in Appendix 27.
- 112. The validation was programmed in an extension of the sample management and Property Survey validation systems used in previous LiW surveys. The CAPI data was imported into a database along with variable names and labels. The system automatically batch validated all interviews so that only those failing any of the checks needed to be examined. For each form a complete list of the errors failed was presented, and if any changes were deemed to be necessary the data could be changed and the validation checks reapplied to ensure no other inconsistencies were generated. A log of all changes made was kept. The changes to the data were exported and then applied in SPSS syntax to the final data outputs.

Data Outputs

- 113. An Excel data output specification document was developed in close consultation with the Data Unit prior to any data outputs being produced.
- 114. Final data outputs were then produced in SPSS. Data was named and labelled according to conventions agreed with the Data Unit. Derived variables requested by the Data Unit were created in SPSS syntax, which can be found in Appendix 28. There was no imputation of missing data.
- 115. The level of response to income questions was within expected ranges. Don't know responses were recorded for total income for approximately 14% of HRPs and spouses, and refusals were given for approximately 21% of HRPs and spouses.

Summary of Data issues

- 116. There were a few questions asked of 100 people or less, and depending on analysis requirements it may be necessary to review these for future years.
- 117. Only 10 people said they share rooms with other households at Q34A. Therefore, only those 10 people answered Q34B and Q35.
- 118. Only 98 people spent more than 12 hours per day caring for someone, which meant that only 98 people answered CARE2. Additionally, only 13 of these people received respite support, and therefore answered CARE3 and CARE4.
- 119. Fewer than 100 people would only be able to get a bus from their nearest bus stop less than once a day (TP2).
- 120. Fewer than 100 people rated several aspects of bus transport as very or fairly poor 'condition of the vehicle' (83), 'attitude of the driver' (66), and 'ease of boarding' (85) (TP8).
- 121. Several MTC sections contained questions which were answered by fewer than 100 people. For example, 'Were you able to use the language of your choice when you last contacted...?' was only asked of 39 people in the Patient Transport Service section (MTCU7), and 74 people in the Ambulance Services section (MTCT8).
- 122. In several MTC sections, fewer than 100 people gave tend to/strongly disagree answers to the agree/disagree questions 'The staff were helpful' and 'I was treated with dignity and respect'. E.g. Patient Transport Service (MTCU5), Dental Practices (MTCM14), Street Cleaning Service (MTCR6), Library Services (MTCQ11), Accident & Emergency (MTCN6), Ambulance Services (MTCT6) and Further Education (MTCO9).
- 123. In several MTC sections, fewer than 100 people wanted to express positive views, and therefore fewer than 100 people were asked the subsequent questions 'Did you express positive views?' and 'Please could you tell me why you did not express a positive view?' This was the case in the Patient Transport Service (MTCU9/11), Dental Practices (MTCM20/22), Train Service (MTCP13/15), Street Cleaning Service (MTCR8/10) and Ambulance Services (MTCT10/12).
- 124. Only 37 households live in a maisonette (DWELL).
- 125. Only 79 homes were being bought under shared ownership and only 16 were being bought using the homebuy scheme (Q93).
- 126. Only 38 people answered Q99 'Are you/is your household part of a group of people who own the freehold on this whole house/building?' and 20



people answered 'Do/Does you/ your household personally own the freehold for this whole house/building, and not just your flat/maisonette?' (Q100).

- 127. Fewer than 100 people had the following types of mortgage: Interest only ISA/PEP; Interest only Pension; and Combined Current Account/Mortgage (Q107).
- 128. Q161 'Do you (or your partner/spouse) receive any help from Income Support towards your mortgage interest payments (i.e. Income Support for Mortgage Interest (ISMI))?' was only asked of 123 people. Therefore, Q162 and Q163 were only asked of 19 people who answered 'yes' at Q161.
- 129. Fewer than 100 households were in council tax bands H (77) and I (21) (Q141a).
- 130. Q191 asked about things which people value. Fewer than 100 people answered in the bottom half of the scale (1-4 i.e. not important) for 'your health', 'being independent', and 'having good friends'.

Grossing

131. The grossing factors for the survey data were calculated by Karsten Shaw at GfK NOP under direction from Ipsos MORI.

Household-level weights

132. The calculation of household grossing weights for 2007 data was completed in the same way as for the previous year. The two-stage process is described below.

Stage 1: Estimation of the number of eligible addresses

- 133. Before any weighting factors could be calculated, an estimate was needed of the population of eligible addresses in each Local Authority (LA) and thereby in Wales as a whole.
- 134. This was straightforward to calculate. For each LA, the estimate of the number of eligible addresses was estimated as:
- 135. (Issued addresses Non-valid addresses) / (Issued addresses + Non-issued addresses) * Total addresses

- 136. Where non-valid addresses are those where all of the outcomes at an address (i.e. a3, a12 and a13) are either missing or coded as:
 - 9. Suspected Second Home/Holiday Home
 - 10. Confirmed Second Home/Holiday Home
 - 11. Property vacant
 - 12. Property derelict
 - 13. Property demolished
 - 14. Non-residential property
 - 15. Institution only (no private households)
 - 16. Property not found
- 137. In other words there had to be at least one valid outcome code at each address for the address to be considered to be valid.
- 138. For example in Isle of Anglesey we had the following figures:

Total addresses 34,377

Sampled addresses 624

of which:

Issued addresses 584

Non-issued addresses 40

Non-valid addresses 89

139. So our estimate of the number of eligible addresses was calculated as:

(Issued Addresses – Non-valid Addresses) / Sampled Addresses x Total Addresses

$$= (584 - 89) / (584 + 40) * 34,377 = 27,270$$

140. These figures gave us our best estimates of the number of addresses to gross up to.

141. The grossing weights for the household level data were established by the following process which involved four distinct steps:

Stage 2: Calculation of grossing weights

Step 1 – calculation of grossing factors to account for probability of selection of addresses (gfl)

142. For each LA, a grossing factor for the probability of selection of addresses (i.e. to gross sampled addresses up to total addresses) was developed (gf1). This was calculated as:

Eligible addresses (estimate) / (Issued addresses – Non-valid addresses)

143. For example in Isle of Anglesey the calculation was:

$$27,270 / (584 - 89) = 55.09$$

Step 2 – calculation of grossing factors to account for probability of selection of households within addresses (gf2)

144. Where there were more than three households at an address, only a maximum of three were selected for interview. If, for example, there were four households found at an address, each one had a 3 in 4 chance of selection. The grossing factor to account for this (gf2) was set to 1 / probability of selection. In our example the grossing factor would be 4/3; otherwise it was set to 1 for all addresses with three or fewer households.

Step 3 – calculation of a response rate at household level (resprate)

145. A response rate was calculated separately for each LA within the following strata. These were the strata where variation in response rates has been observed:

```
property type = 'House' and condition = 'Good' or 'Not seen' or missing

property type = 'House' and condition = 'Bad' or 'Ugly'

property type = 'Flat' or 'Other'

property type = 'Not recorded'
```

146. The response rates were calculated for each cell as:

Households interviewed / Total valid outcomes at all valid addresses



- 147. The strata used were defined on the same basis as in 2004 2006. The stratification variables used were LA, property type and overall condition. On the basis of observed differences between response rates, it was decided to stratify by houses and flats/other with each LA. There was also a difference between Good properties and Bad/Ugly properties within LA (although there was insufficient sample to examine this within flats). Because of the small sample 'not seen' overall, these were grouped together with Good properties.
- 148. The overall response rates across all strata for 2007 were as follows:

Houses	72.2% (n = 9,301)
Houses (Good/not seen)	72.8% (n = 8,456)
Houses (Bad/Ugly)	66.4% (n = 845)
Flats/Other	65.1% (n = 929)
Not recorded	57.0% (n = 753)

149. The figures show a significant difference in response rates between Houses and Flats/Other and a further difference between Good houses and Bad/Ugly houses. Although differences between the groups vary slightly from year to year, it was decided to retain the existing strata definitions unless there was a significant change in the response rates which merited construction of new strata. No such change was observed from 2006 to 2007.

Step 4 – calculation of a weight to adjust for response rate (respwt)

150. This weight was calculated separately for each LA within the strata described in step 3 and is simply 1/resprate.

Step 5 – calculation of a final grossing weight (fingross)

- 151. The final grossing weight was calculated as the product of the weights calculated at steps 1, 2 and 4.
- 152. That is,

$$fingross = gf1 * gf2 * respwt$$

Step 6 – comparison with population figures & post-stratification

- 153. The distribution of tenure from the grossed household level data was compared with data from the 2001 census and scaled up to estimate the household count in 2007. This estimate was created by using the dwelling stock estimates produced by the Welsh Assembly. A factor representing the April 1 2007 data compared with the April 1 2001 data was created and applied to the census data. This was calculated separately for each tenure type and LA. The census data was also used to calculate the proportion of owner-occupiers and those privately renting from the dwelling stock data as this is not distinguished in the dwelling stock data.
- 154. Using Isle of Anglesey as an example, the 2007 (March 31st) dwelling stock data gave the following breakdown:

Rented from local authorities: 3,922

Rented from registered social landlords (housing association): 533

Owner-occupied, privately rented and other tenures: 27,350

155. From the 2001 Census, we have:

Total Owner Occupied Households = Owner occupied: Owns outright + Owner occupied: Owns with a mortgage or loan + Owner occupied: Shared ownership

$$= 9,875 + 9,339 + 71$$

$$= 19,285$$

156. Total households privately renting and other = Rented from: Private landlord or letting agency + Rented from: Other

$$= 2,696 + 1,558$$

$$= 4,254$$

- 157. Therefore, Total owner-occupied and privately renting and other = 19,285 + 4,254 = 23,539
- 158. So the estimated proportion of households who are privately renting and other tenures is 4,254 / 23,539 = 18.07%
- 159. And hence the proportion of households who are owner-occupiers is 81.93%.



160. So, returning to the dwelling stock data.

Owner-occupied, privately rented and other tenures: 27,350

161. Using the proportions calculated from the census, we estimate that:

Owner-occupied =
$$27,350 * 81.93\% = 22,407$$

Privately renting and other tenures = 27,350 - 22,407 = 4,943

162. The equivalent calculation was conducted upon the 2001 dwelling stock data and the following estimates achieved:

Rented from local authorities: 4,664

Rented from registered social landlords: 459

Owner-occupied: 21,744

Privately renting and other: 4,797

163. Factors for the increase between 2007 and 2001 were then calculated for each LA by tenure. For the Isle of Anglesey, the factors were:

Rented from local authorities: 3,922 / 4,664 = 0.841

Rented from registered social landlords: 533 / 459 = 1.161

Owner-occupied: 22,407 / 21,744 = 1.030

Privately renting and other: 4,943 / 4,797 = 1.030

- 164. These factors were then applied to the census counts of households in order to gain an estimate of the household counts for 2007 to be used as post stratification targets for the 2007 Living in Wales data.
- 165. For Isle of Anglesey, this worked out as follows:

Rented from local authorities: 0.841 * 4,396 = 3,697

Rented from registered social landlords: 1.161 * 421 = 489

Owner-occupied: 1.030 * 19,285 = 19,873

Privately renting and other: 1.030 * 4,254 = 4,384

(Note the last two examples have been corrected to take into account rounding errors.)

166. This was repeated for each LA, leading to the figures in the right hand side in the table below.

Table 12: Estimated 2007 Households

	Living in grosse		Estimated Househ	
	Frequency	Percent	Frequency	Percent
Owner occupied	864,421	70.9	927,415	73.5
Local Authority	159,820	13.1	137,216	10.9
Housing Association	63,401	5.2	61,592	4.9
Private rented	131,710	10.8	135,048	10.7
Total	1,219,351	100.0	1,261,270	100.0
			Source:	Ipsos MORI

167. The total number of households was slightly less (97%) than the census estimate adjusted for dwelling stock count. Overall levels of owner occupancy, households rented from Housing Associations and households privately renting were close to the proportions from the total estimated. The proportion of households rented from local authority was a little greater. However, there was considerable variation in the proportion of tenure type by LA. For instance, privately rented households varied from 5.4% in Torfaen to 18.2% in Ceredigion; and Housing Association households varied from 1.7% in Isle of Anglesey to 13.4% in Bridgend, although the variations with LA year on year were negligible.

- 168. The (grossed) data was weighted by tenure to correct for these differences. This weighting was carried out within LA using the numbers (rather than percentages) from the two surveys so that the total estimate reflected the estimate of the adjusted census data.
- 169. Two additional weighting factors were generated as a result of this:

tenurewt – weighting factor for tenure within LA

fingros2 = fingross * tenurewt

Person-level weights

170. As all questions were asked of all respondents, there was no need to create separate subgroups this year. Thus only one grossing variable was created.

Weighting Variables Used

171. The variables used to construct the weighting targets were:

- Economic Fora
- Age within Gender
- Working Status within Gender
- 172. Economic Fora were estimated and used in preference to Local Authority due to the sample sizes. The definitions used of Economic Fora by Local Authority are in the table below:

Table 13: Definitions of Economic Fora used

Economic Fora	Local Authority
North Wales	Isle of Anglesey
	Conwy
	Denbighshire
	Flintshire
	Gwynedd
	Wrexham
Mid Wales	Powys
	Ceredigion
South West Wales	Carmarthenshire
	Neath Port Talbot
	Pembrokeshire
	Swansea
South East Wales	Blaenau Gwent
	Bridgend
	Caerphilly
	Cardiff
	Merthyr Tydfil
	Monmouthshire
	Newport
	Rhondda Cynon Taf
	Torfaen
	The Vale of Glamorgan
	Source: Ipsos MORI

173. For Age within Gender, the breaks were:

- Males aged 16-44
- Males aged 45-64
- Males aged 65 and over
- Females aged 16-44
- Females aged 45-59
- Females aged 60 and over
- 174. Sample size led us to combine the 16–29 age group with 30–44 group. The source of this data was the mid-year population estimates for 2006, which are the most recently available (released in mid 2007). This data was also be used for grossing purposes and the overall population estimate of 2,404,300.
- 175. In accounting for Working Status within Gender, we used the same breaks as in the 2006 survey. These were:
 - Males working full or part-time (including self-employed)
 - Males not working full or part-time
 - Females working full or part-time (including self-employed)
 - Females not-working full or part-time
- 176. The proportion of working males and females was taken from the most recently available Labour Force Survey (Oct 2007 Jan 2008) and applied to the mid-year population estimates for males and females overall (the same data used for the age within gender data).
- 177. The proportions for the Estimated Economic Fora were obtained from the mid-year population estimates (2006), which were calculated by Local Authority and then converted into Fora using the definitions listed in Table 13.

Weighting Scheme

178. To construct the weights, we used RIM weighting, which is an iterative calibration weighting scheme that uses marginal profiles of the target variables to create a single set of weights which correspond to all the marginal profiles (or as close to these as possible, if exact convergence cannot be reached due to the restrictions). The software used to



- implement this scheme was Quantum. In this instance convergence was reached in seven iterations.
- 179. The benefit of this approach in comparison with cell weighting is that the joint distributions of the target variables are not required and, as such, it was not necessary to sub-divide the data up into numerous cells that only have a small number of respondents in them, which invariably leads to large (or small) individual weights.
- 180. The two rims used were Age within Gender within Economic Fora and Working Status within Gender.

Targets and Weighted Data

181. The table below shows the targets obtained followed by the weighted proportions and totals for the weighted data.

Table 14: Targets (Age within Gender within Economic Fora)

	Target	Target
	(%)	Population
North Wales Female 16-44	5.0	120,540
North Wales Female 45-59	2.9	70,500
North Wales Female 60+	3.9	94,700
North Wales Male 16-44	5.0	120,760
North Wales Male 45-64	3.7	88,800
North Wales Male 65+	2.3	55,000
Mid Wales Female 16-44	1.5	35,040
Mid Wales Female 45-59	0.9	22,400
Mid Wales Female 60+	1.3	30,600
Mid Wales Male 16-44	1.5	35,660
Mid Wales Male 45-64	1.2	29,100
Mid Wales Male 65+	0.8	19,200
South West Wales Female 16-44	5.0	119,240
South West Wales Female 45-59	2.9	69,300
South West Wales Female 60+	3.8	91,200
South West Wales Male 16-44	4.9	116,880
South West Wales Male 45-64	3.6	86,200
South West Wales Male 65+	2.3	54,500
South East Wales Female 16-44	11.8	284,340
South East Wales Female 45-59	5.8	139,400
South East Wales Female 60+	7.1	170,700
South East Wales Male 16-44	11.6	278,340
South East Wales Male 45-64	7.2	173,600
South East Wales Male 65+	4.1	98,300
	100.0	2,404,300
		Source: Ipsos MORI

Table 15: Targets (Working Status within Gender)

	Target (%)	Target Population
Male Working	29.8%	717,022
Male Not Working	18.3%	439,278
Female Working	25.6%	614,996
Female Not Working	26.3%	633,004
	100.0%	2,404,300
		Source: Ipsos MORI

Table 16: Age within Gender within Economic Fora

			Differen	ce from Target
	0/0	Weighted Population	0/0	Population
North Wales Female 16-44	5.0	120,762	0	2
North Wales Female 45-59	3.7	88,798	0	-2
North Wales Female 60+	2.3	54,991	0	-9
North Wales Male 16-44	5.0	120,544	0	4
North Wales Male 45-64	2.9	70,502	0	2
North Wales Male 65+	3.9	94,703	0	3
Mid Wales Female 16-44	1.5	35,660	0	(
Mid Wales Female 45-59	1.2	29,100	0	(
Mid Wales Female 60+	0.8	19,197	0	-3
Mid Wales Male 16-44	1.5	35,041	0	1
Mid Wales Male 45-64	0.9	22,401	0	
Mid Wales Male 65+	1.3	30,601	0	
South West Wales Female 16-44	4.9	116,883	0	3
South West Wales Female 45-59	3.6	86,197	0	-,
South West Wales Female 60+	2.3	54,491	0	-9
South West Wales Male 16-44	5.0	119,244	0	4
South West Wales Male 45-64	2.9	69,302	0	2
South West Wales Male 65+	3.8	91,202	0	2
South East Wales Female 16-44	11.6	278,341	0	
South East Wales Female 45-59	7.2	173,596	0	_4
South East Wales Female 60+	4.1	98,284	0	-10
South East Wales Male 16-44	11.8	284,350	0	10
South East Wales Male 45-64	5.8	139,405	0	1
South East Wales Male 65+	7.1	170,705	0	
	100.0	2,404,300		
			Se	ource: Ipsos MOI

Table 17: Working Status within Gender

			Differen	ce from Target
	%	Weighted Population	0/0	Population
Male Working	29.8%	717,022	0	0
Male Not Working	18.3%	439,278	0	0
Female Working	25.6%	614,996	0	0
Female Not Working	26.3%	633,004	0	0
	100.0%	2,404,300		
			S	ource: Ipsos MORI

Miscellaneous Output

182. The efficiencies of the weighting scheme is 86.8%. This allow us to calculate Effective Sample Size, which is $7,753 \times 86.8\% = 6,730$.

Implications

Sampling

- 183. The response rates achieved in 2004, 2005 and 2006 have been subsequently used to model response rates, and therefore inform the number of addresses issued in 2007. These should be revisited each year using the aggregate data set to make increasingly accurate sampling predictions.
- 184. Because of the number of genuine interviews conducted at the addresses containing organisation names, the practice established in 2004 in this survey (and also used in 2005 and 2006) of only excluding such addresses that cannot be matched to an entry on the Valuation Office Agency's domestic Council Tax Valuations list should be continued.

Materials

- 185. In 2004, 4.4% of valid addresses were missing data on first impressions scores on the contact sheet. For 2005, 2006 and 2007 this information was moved to the front of the contact sheet to make it easier to complete, and more obvious to spot where the information has not been recorded. The amount of missing data on these variables was reduced to 0.6% in 2005 and 2006, but rose to 1.9% in 2007. Completion of this variable needs to be stressed in the 2008 interviewer briefings.
- 186. The number of interviews conducted in Welsh increased again in 2007 from 2.5% to 2.8%. We would suggest leaving the information, stating that Welsh language interviews are available on request, on the 2008 leaflet, and again stress this option in the briefings.

Notifications

187. Letters were sent to the Chief Constable at each Police Authority and Chief Executive of each Local Authority. In order to raise the profile of the survey, additional Local Authority staff were notified (the Chief Housing Officer, Chief Environmental Health Officer and Head of Public Relations) and this practice should continue.

Fieldwork

188. An exercise on contact sheet completion was included in the briefing, which worked well. However, it may be better in 2008 to reduce the number of these exercises and distribute an example for interviewers to work on in their own time. The coding exercise also worked well and new topics should be considered for future years.

Questionnaire

189. The structured timetable for questionnaire development, with clear stages, deadlines and sign-offs, worked well in 2007 and we would recommend continuing this.

Welsh Translation

190. A member of the Data Unit team visited the Ipsos MORI offices to advise on amendments to the programming for the Welsh CAPI. We would recommend this should be included in the timetable for 2008, in the event there are outstanding programming issues.

Data

191. The production of the final data files was a fairly long and complicated process which required multiple iterations of the files. It was agreed between Ipsos MORI and the Data Unit that the number of iterations required could be reduced by a representative from the Data Unit visiting Ipsos MORI offices to discuss any complicated issues arising in the data files with the Ipsos MORI executives and Data Team. This should prove to be very useful and will likely be employed in future years of the survey, in order to reduce the number of iterations of the data files.

Timetable

192. The timetable for certain tasks, such as development of materials, questionnaire development and data outputs, was divided into specific sections for the main iterations, but less detailed for quicker turnaround stages. We would recommend continuing this in 2008, as it makes the management of the timetable document much easier and gives a more flexible approach to completing the final stages of a task.

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Appendices

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