

## Sampling

### **The Population Sampled**

The sample is designed to be representative of the adult population aged 15+ of Great Britain. The survey population is estimated to have been approximately 52,748,000 according to JICPOP's mid 2017 projections based on 2011 census data.

### **Overview of the PAMCo Sample**

PAMCo has a multi-stage disproportional pre-selected sample design.

The three stages of sampling are as follows:

- 1) Selection of sampling points
- 2) Selection of addresses
- 3) Selection of individuals

The sampling frame for the selection of sampling points comprises all Output Areas (OAs) in Great Britain. In 2017, two OAs were selected for a sampling point (prior to 2008 only one was selected).

The sampling frame for the selection of addresses is the Postal Address File (PAF).

Interviewers were issued with the pre-selected addresses to contact. At each household contacted they enumerated eligible individuals aged 15+. The final stage of the sampling was then to select which of these eligible individuals should be interviewed. One individual was selected in most households, and up to two individuals in larger households. The rules as to how this was done are described later in this document.

Some disproportional sampling was used at the stage of selecting sampling points in order to over-sample certain ACORN areas particularly likely to contain individuals with AB social grades.

### **Selection of Sampling Points**

The first stage of sampling is to select the sample points (or locations) where interviews will be carried out. Before this is done, certain ACORN areas are upweighted (and others downweighted). This is done so as to oversample areas where individuals with AB social grades are particularly likely to live, and therefore increase the number of interviews taken with AB participants.

The scheme used to do this is revised periodically. It was revised in 2014 so as to use the 2013 ACORN types. It was revised again for 2016 to amend the number of ACORN type categories from five to seven.

The steps taken to select the sampling points were therefore as follows:

- a) Sampling weights were applied to the adult populations of OAs by 7 categories of ACORN Types, as follows:

Category	ACORN Types	Weights Applied
1	1, 2, 3, 9, 14	1.90
2	4, 5, 7, 8	1.65
3	6, 10, 15, 16, 17, 18	1.35
4	11, 12, 13, 19, 20, 21, 22, 24, 26, 29, 61, 00	1.10
5	23, 25, 27, 28, 30, 31, 32, 33, 34, 36, 37, 50	1.00
6	35, 38, 39, 40, 41, 42, 43, 49, 53, 54, 55, 60, 62	0.73
7	44, 45, 46, 47, 48, 51, 52, 56, 57, 58, 59	0.63

- b) Great Britain was divided into 60 area groupings, devised for PAMCo. Ultimately these areas were individually weighted and used to piece together the Government Office Region and non-overlap ISBA TV regions.

A full list of the 60 areas can be found overleaf. For the purposes of sampling, the area groupings were further sub-divided into district groupings.

- c) The weighted adult populations of each of the 60 area groupings were calculated. The target number of sampling points for each area grouping was then set. The total number of points at this stage was 2,568 per annum.
- d) Within each area grouping, OAs were ranked in descending order by PAMCo district grouping, then within district by PAMCo ACORN category, and finally within PAMCo ACORN category by NS-SEC. Prior to 2005, a system of AB scores was used instead of NS-SEC as the final means of ranking.
- e) The required number of OAs within each area grouping as specified at b) was then selected with probability proportional to weighted adult populations, using random start/fixed sampling interval procedures.
- f) Any selected OA falling into a 'no-go' area (as separately defined) was replaced with one in the sample District and same ACORN Type with population size closest to the originally selected OA.
- g) Modified procedures were applied in Scotland in areas 49, 50, 51, 52, 56, 57, 58 and 59. In these areas the target number of points was increased, relative to other areas, to the numbers shown in the table below.

## Sampling Areas

The area groupings used and the target number of Sampling Points selected were as follows:

### England and Wales

Area Groupings	Government Office Region	ISBA Area	No. of Points Selected
1	South West	South West	72
2	South West	Southern	36
3	South East	Southern	72
4	South East	Southern	36
5	South East	Southern	48
6	South East	Southern	84
7	South East	London	72
8	East of England	London	84
9	Greater London	London	48
10	Greater London	London	96
11	Greater London	London	72
12	Greater London	London	72
13	East of England	East of England	60
14	East Midlands	East of England	24
15	South East	London	36
16	East of England	East of England	36
17	East of England	East of England	60
18	South East	Midlands	48
19	South West	Midlands	24
20	West Midlands	Midlands	72
21	West Midlands	Midlands	48
22	Greater London	London	48
23	West Midlands	Midlands	24
24	West Midlands	Midlands	24
25	West Midlands	Midlands	48
26	East Midlands	Midlands	36
27	East Midlands	Midlands	36
28	East Midlands	Midlands	36
29	Wales	Wales and the West	12
30	Wales	Wales and the West	36
31	Wales	Wales and the West	48
32	North West	Border	24
33	South West	Wales and the West	24
34	South West	Wales and the West	60
35	Yorkshire and the Humber	Yorkshire	84
36	Yorkshire and the Humber	Yorkshire	48
37	Yorkshire and the Humber	Yorkshire	36
38	East Midlands	Yorkshire	48
39	Wales	Lancashire	12
40	North West	Lancashire	60
41	North West	Lancashire	60
42	North West	Lancashire	24

43	North West	Lancashire	48
44	North West	Lancashire	48
45	Yorkshire and the Humber	North East	24
46	North East	North East	48
47	North East	North East	24
48	North East	North East	24

## Scotland

Area Groupings	Area Names	No. of Points Selected
49	Aberdeen	24
50	Dundee	12
51	Edinburgh	36
52	Strathclyde, urban	96
53	Strathclyde, rural	24
54	Lothian	12
55	Central	12
56	Fife	24
57	Other Tayside	24
58	Other Grampian	24
59	Highland	24
60	Scottish Borders	12

## Allocation to Month, Day of Interview and Questionnaire Version

The selected sampling points were systematically allocated to month and then start day, to ensure a balanced daily interviewing schedule. Interviewers were given ten days to complete a standard assignment, starting on the specified day.

In addition, each sampling point was assigned a code to determine the rotation order to be used to ask about the various newspapers and magazines during that particular assignment. For details of the rotation orders, see document entitled 'The Interview'.

## Selection of Addresses

Within each selected pair of OAs, 26 or 27 standard and 12 replacement addresses were selected, apart from London where 29 standard addresses were selected. There were further variations in the numbers of addresses issued as follows:

In London, the standard number of addresses issued was reduced if there were indications that a high proportion of multi-household/tenement addresses might be found.

Interviewers were allowed to use the replacement addresses issued to them only when they identified that a standard address was a:

- Business address
- Addresses not located, empty or demolished
- Non-main residence

Replacement addresses were randomly selected across the selected OA and interspersed with the standard addresses.

Interviewers were instructed to use replacement addresses which were nearest, on the list of sampled addresses, to the original address to be replaced, to ensure randomness. The address letter of the original address was transferred to the replacement address used. The reasons for replacement were recorded for office inspection.

A minimum of five calls was prescribed for each potentially productive address, before attempts to interview could be abandoned. There was no restriction on the total number of calls. Interviewers were encouraged to make as many calls as possible, varying them by time of day.

**Selection of Individuals**

The selection of individuals was done by undertaking the following steps:

- a) All selected addresses within each selected OA were listed and the letters P, Q, R and S were consecutively allocated to them (these letters were not allocated to replacement addresses).
- b) A Contact Questionnaire for each address (not replacement addresses) was prepared specifying the address letter.
- c) For all issued addresses the Contact Questionnaire specified the one or two persons to be interviewed, as follows:

**Address Letter**

No. of adults at address	P	Q	R	S
1	First	First	First	First
2	First	Second	First	Second
3	Second	First, Third	Second, Third	First
4	First, Fourth	Second, Third	First, Fourth	Second, Third
5	Second, Fourth	First, Fifth	First, Third	Second, Fifth
6+	First, Youngest	Third, Fifth	Second, Fifth	Fourth, Youngest

- d) There were separate sheets listing replacement addresses.

Interviewers were instructed to list all persons aged 15+ in a selected household, in descending order of age and to select for interview the person(s) who accorded with the specification given (that is according to the total number of adults at the address and the letter allocated to that address).

At multi-household addresses, tenements (in Scotland) and residential institutions, there were special selection procedures, details of which are available on application to Ipsos MORI.