

Beta This is a new service – your [feedback \(opens in new tab\)](#) will help us to improve it.

[Home](#) ▾ [Methodologies](#) ▾ Employer Skills Survey 2022-2024

Methodology

Employer Skills Survey 2022-2024

Published 24 July 2025

Last updated 24 July 2025
► See all notes (1)

 Search this page

Related information

Publications

[Employer Skills Survey](#)

Related pages

[Find statistics and data](#)
[Education statistics: glossary](#)

Help and support

[Contact us](#)

1. Introduction

The Employer Skills Survey gathers labour market intelligence (LMI) on employer skills needs and training activity among employers in England, Northern Ireland, Wales and Scotland. The 2024 survey is the seventh in the biennial series of UK

Employer Skills Surveys dating back to 2011 collecting LMI from all countries of the UK (with the exception of 2019 which did not include Scotland).

From 2010 to 2017, the Employer Skills Survey sat alongside the Employer Perspectives Survey (EPS) to produce insights that complemented each other, with the 2 surveys running in alternate years (EPS was last conducted UK-wide in 2016). The focus of the Employer Perspectives Survey was primarily outward-looking, covering employer engagement with the wider skills system, whereas the Employer Skills Survey had a more inward-looking focus assessing the current skills position and skill needs of employers. Since ESS 2019, the 2 surveys have been in effect merged. To avoid an excessively long questionnaire the merger of the survey involved extensive modularisation. This is discussed in the questionnaire design section.

In addition to the main ESS series delivered between 2011 to 2019 a smaller-scale, Employer Pulse Survey was conducted among 5,000 employers in England in 2021. This survey gathered information on employer skills needs and training activity, and is related to, but not part of the main ESS series. As well as providing some interim ESS measures, it was also used to test some new questions and alternative wording of some key ESS questions. Scotland also ran its own Employer Skills Survey in 2020 and a Scottish Employer Perspectives Survey in 2019 and 2021.

As in previous years, the 2022 and 2024 Employer Skills Surveys had 2 main elements:

- The core survey: covering such topics as recruitment (including skill-shortage vacancies); skills gaps; training and workforce development; upskilling needs; vocational qualifications; apprenticeships. The 2024 survey also included a more extensive section on technical education in England.
- The Investment in Training follow-up survey: covering the investment sites make in training their staff.

This technical report covers each of these in turn.

[Go to top](#)

2. The core survey

For the core ESS 2024 survey, a total of 22,712 interviews were undertaken between June 2024 and January 2025. Table 2-1 provides a breakdown of completed interviews by nation.

Table 2-1 Interviews achieved by nation in 2024

Nation	Number of interviews	Percentage of total interviews
England	8,639	38%
Northern Ireland	3,388	15%
Wales	5,605	25%
Scotland	5,080	22%

For the core ESS 2022 survey, a total of 72,918 interviews were undertaken between June 2022 and March 2023. Table 2-2 provides a breakdown of completed interviews by nation.

Table 2-2 Interviews achieved by nation in 2022

Nation	Number of interviews	Percentage of total interviews
England	59,486	82%
Northern Ireland	3,400	5%
Wales	4,825	7%
Scotland	5,207	7%

Sampling

Sampling unit

The sampling unit was at a site level, rather than at an organisation / company level. This is in recognition of the influence that local labour markets have on skill issues and the fact that skills issues are felt most acutely at the site level. This mirrored the site-based approach adopted in previous UK Employer Skills Surveys and the UK Employer Perspectives Surveys, as well as the legacy skills surveys in each nation.

The individual sought at each site was the person who had most responsibility for staff issues such as training, recruitment or resourcing. For smaller sites this was

most often the general manager or owner, and for larger sites this was most often the HR manager.

Survey scope / eligibility

In line with the approach adopted since ESS 2013, the survey population for ESS 2022 and 2024 was sites with 2 or more employment. Sites were eligible if they had 2 or more people on the payroll at the site, regardless of whether or not these individuals were proprietors or not, and excluding the self-employed, outside contractors and agency staff.

The 2011 survey was the first year of transitioning to a UK-wide Employer Skills Survey and so it had 1 or more employment coverage to allow comparisons with the preceding national skills surveys. Note that in the current and the 2013-2022 ESS reports, where comparisons are made with 2011, this is based on 2011 data that has been re-weighted on a 2 or more employment population. This means that results from the 2011 survey that are presented in the 2022 and 2024 reports will not necessarily match those published in the 2011 report. The rationale for the change in survey population and the 2011 re-weighting process is detailed in the ESS 2013 technical report.

ESS 2019 did not include employers based in Scotland. Instead, the Scottish Government commissioned its own Scotland-wide ESS in 2020 and EPS in 2019 and 2021. This means that in the published findings, ESS 2019 results are not shown where UK results are shown over time. However, where time series is covered at nation level, it is possible to compare to ESS 2019 for England, Northern Ireland and Wales results. Comparisons have not been made to the Scottish ESS 2020 or the Scottish EPS 2021 in the UK reports due to the timings of these surveys, with fieldwork undertaken for the Scottish surveys during the COVID-19 pandemic. This means that Scottish ESS results are not comparable to the England, Northern Ireland and Wales 2019 ESS. In the main UK report we do compare Scottish EPS 2019 results where comparable questions were asked in ESS 2019.

Sampling process

The 2024 Employer Skills Survey is the second in the series to adopt a random probability (RPS) sampling approach. The RPS approach was fully adopted in ESS 2022 following a trial in the West Midlands region in ESS 2019. ESS 2011 to 2019, all previous iterations of the EPS, and the Scottish ESS 2020 and Scottish EPS 2019 and 2021, all used a quota sampling approach, where the goal is to obtain a target number of achieved interviews with a certain size, sector and geographic

profile from the issued sample. There was no set process for the number of times each piece of sample should be called, and once a particular quota target had been reached (for example Manufacturing firms in the East of England with 2-4 employees) then remaining sample of that type was withdrawn (unless other quota cells are likely to fall short of target, and then initial quota targets are adjusted to take account of this).

While this approach has various benefits including flexibility, and cost-effectiveness, there are also some disadvantages. For example, it can lead to inefficient use of sample, where sample is abandoned, once targets are hit, which in turn introduces potential non-response effects.

In contrast, under a random probability sampling (RPS) approach, all sample issued is processed according to agreed protocols until all leads are exhausted. There are no quotas or caps on achieved interviews. In theory, it means that units sampled from a given population cells have an equal and known probability of being sampled.

There are various advantages and disadvantages to this sampling approach, outlined below:

- Being able to assign a known probability of being sampled to every unit in the sampling frame enhances estimates of statistical confidence.
- It leads to more efficient use of issued sample, with zero wastage and a high conversion rate per cell compared against quota sampling. This maximises the number of achieved interviews among the issued sample and gives better coverage of difficult to reach respondents.
- Given there is a set process for the minimum number of times each record is called it provides a more consistent basis for projects where more than one field agency is involved.
- It ensures equal treatment of all units of sample within a cell, both in terms of probability of selection and the fieldwork processes administered in order to achieve interviews.
- It is considered the most robust method for national statistics and public sector surveys.

Following a trial of RPS in the West Midlands region in ESS 2019 (more information is available in the ESS 2019 technical report), the RPS process was scaled up for all regions in the 2022 survey.

The following contacting rules have been established:

2 to 4, 5 to 9 and 10 to 24 employees

In 2024, a minimum of 8 call attempts for all sample records (a minimum of 10 in 2022). If at any point during those 8 attempts a 'definite appointment' was registered (i.e. there was a firm interest in taking part), minimum number of tries for that record was increased to 10 (12 in 2022). If the last call outcome was a 'definite appointment', the number of attempts was increased by 1 (up to a maximum of 13 calls in 2024 and 15 in 2022).

25 to 49 and 50 to 99 employees

As above, except if a definite appointment was registered in the initial 8 tries (10 in 2022), the number of attempts was increased to 12 (14 in 2022). If the last call outcome was a 'definite appointment', the number of attempts was increased by 1 (up to a maximum of 15 calls in 2024 and 17 in 2022).

100 to 249 employees

A minimum of 10 call attempts (12 in 2022), which increased to 13 (15 in 2022) if a definite appointment was registered. If the last call outcome was a 'definite appointment', the number of attempts was increased by 1 (up to a maximum of 18 calls in 2024 and 20 in 2022).

250 or more employees

A minimum of 13 call attempts (15 in 2022), which increased to 18 if a definite appointment was registered (20 in 2022). If the last call outcome was a 'definite appointment', the number of attempts was increased by 1 (until a maximum of 23 in 2024 and 25 in 2022).

Population data used for setting targets

Population statistics used to stratify the business population were established through the [Inter-Departmental Business Register \(IDBR\) \(opens in new tab\)](#), which was the latest available at the time. The IDBR is administered by the Office for National Statistics (ONS), which holds records of all businesses registered for VAT and all businesses operating a pay as you earn (PAYE) income tax scheme. The IDBR is widely regarded as being the most accurate and comprehensive 'official' source of business population data available and was used for sampling and weighting in all previous editions of the UK Employer Skills Surveys and in the nation-specific legacy skills surveys.

Setting targets

Quotas are not set under an RPS approach, as at the point where a record is contacted, it must be called to the required protocols as outlined above. However, notional 'ideal' targets were set in order to achieve a representative sample.

In 2024, targets were set using interlocked size and sector targets within nation, with the exception of Wales, which was sampled at regional level (North, Mid, South East and South West Wales). This was a change for England, which was previously initially sampled at regional level (using English Government Office Regions), and then combined in a bottom-up approach. The reasons for this change are discussed later in this section. Mirroring the approach in previous iterations of ESS, ESS 2024 used a disproportionate stratified random sampling strategy, such that the targets set intentionally oversampled some groups and under sampled others, rather than setting targets in direct proportion to the business population. In practice this means that some smaller sub-groups of employers (such as large establishments) are oversampled to ensure that a sufficiently large number of interviews are achieved to allow for robust sub-group analyses.

For ESS 2024, the target number of interviews for England was substantially reduced. This is because in 2022, a pattern of alternating between large and small sample sizes was adopted, starting with a large sample in 2022. The 2024 survey aimed for 8,580 interviews in England, compared with 59,486 interviews achieved in ESS 2022. The full breakdown of interviews achieved in ESS 2022 and the 2024 target for each nation is shown in Table 2-3.

Table 2-3 Interview / target distribution by nation, 2022 vs. 2024

Nation	2022 interviews achieved	2024 target
England	59,486	8,580
Northern Ireland	3,400	3,440
Wales	4,825	5,475
Scotland	5,207	5,150
Total	72,918	22,645

The scale of this reduction in the England target meant that the usual regional approach to sampling sites in England (stratifying size by sector within region) would lead to small counts at cell level and required a change in approach.

In 2022, firstly, overall targets were set by nation, as shown in Table 2-5. The overall target for each nation was then distributed by size band according to the distribution in Table 2-4. This follows the method of ESS 2019 (and previously from EPS 2016) of striking a balance between over-sampling larger employers (relative to the population), while not skewing the size profile too far away from smaller sites. Note, the 250+ target was initially set at 3%, but due to the 250+ sized group being historically challenging to achieve (in 2019, 925 interviews were completed), a decision was made to cap the total number of interviews to 1,500 in this category (effectively reducing the distribution to 2%). Sample numbers falling beyond the 1,500 cap were distributed proportionately among the other sizebands.

Within England in 2022, the overall targets within each size band were initially distributed across the nine English regions (as shown in Table 2-5), half in proportion to their distribution by region within size band in the IDBR population data and half equally across the regions, providing a balance between boosting smaller regions and mirroring the universe profile. Note that this is a slight modification from the ESS 2019 practice whereby this 50:50 'proportional / equal' distribution occurred at overall region level, rather than independently within size band. The modified method in 2022 ensured that the target was distributed according to a more consistent process within size band, although in practice due to the similarities of IDBR regional distribution within size band, the differences between the resulting target by cell are very small compared with the 2019 method.

For each size band within region the targets were distributed across thirteen industry sectors in proportion to the corresponding IDBR distribution. The overall English targets by interlocking size band and sector were derived by summing the corresponding cells for the nine English regions.

For Northern Ireland and Scotland, size targets were set using the target UK size distribution shown in Table 2-5. Then within size band, the process was the same as for English regions, distributing across thirteen industry sectors in proportion to the corresponding IDBR distribution.

For Wales, due to specific regional sample size requirements, purposive targets were initially set at regional level (as per Table 2-5 below). The process for size and sector target-setting then mirrored that of the English region approach.

Table 2-4 Target distribution of size at UK level in 2022 and 2024

Number of employees	2 to 4	5 to 9	10 to 24	25 to 49	50 to 99	100 to 249	250 or more
Distribution	27%	23%	22%	13%	6%	6%	2%

In contrast, the approach in 2024 began by setting the overall target for England at 8,580. The overall ideal achieved sample was then distributed by sizeband, according to the purposive proportions in Table 2-4 (as per the 2022 approach described above (though for England rather than for English regions)), and then distributed across thirteen sectors based on the sector profile within each sizeband in England, according to the IDBR population counts. The England level size by sector cells were then allocated to regions according to the regional population distribution in the IDBR, therefore establishing a set of ideal regional profiles. This ensured that there was suitable English region representation in the final sample.

There were no substantial reductions in targets for the devolved administrations (DAs), therefore no such considerations were required as for England. For Northern Ireland and Scotland, sampling has always been done at nation level, so largely followed the 2024 England target setting approach, though without the last step of setting ideal regional profiles (the fallout of regional targets for Scotland and Northern Ireland were monitored during fieldwork). For Wales, the regional approach adopted in 2022 was retained due to the need to report size and sector findings within regions, though the rest of the target setting process was the same as for the other nations.

Table 2-5 shows a full breakdown of national and regional ideal targets set for the purposes of sampling ESS 2024.

Revisions to targets in 2022

Due to fieldwork challenges, including it being more difficult to get a hold of employers compared to previous years, the target number of interviews in 2022 was reduced from 85,400 to 77,630, to provide a 10% reduction in the original target for English regions and a 5% reduction in the devolved administrations. The final notional targets by region and nation are shown in Table 2-5.

Table 2-5 Target number of interviews by region / nation

Nation	Target number of	Target number of	Target number
---------------	-------------------------	-------------------------	----------------------

	interviews in 2022 (original)	interviews in 2022 (revised)	of interviews in 2024
England	70,000	63,000	8,580
East Midlands	6,798	6,118	701
East of England	7,744	6,970	940
London	10,349	9,314	1,596
North East	5,260	4,734	333
North West	8,174	7,357	1,058
South East	9,699	8,729	1,413
South West	7,586	6,827	913
West Midlands	7,313	6,582	839
Yorkshire and the Humber	7,077	6,369	787
Northern Ireland	3,900	3,705	3,440
Wales	5,600	5,320	5,475
North Wales	1,325	1,259	1,297
Mid Wales	800	760	784
South East	1,225	2,137	2,199

Wales

South	2,250	1,164	1,195
West			
Wales			
Scotland	5,900	5,605	5,150
Total UK	85,400	77,630	22,645

Sector categorisation

The sector categorisation for sampling and weighting matched that of previous ESS. These sectors, defined using Standard Industrial Classifications 2007 (SIC 2007), were:

- Primary Sector and Utilities (SIC 01-03, 05-09, 35-39)
- Manufacturing (SIC 10-33)
- Construction (SIC 41-43)
- Wholesale and Retail (SIC 45-47)
- Hotels and Restaurants (SIC 55-56)
- Transport and Storage (SIC 49-53)
- Information and Communications (SIC 58-63)
- Financial Services (SIC 64-66)
- Business Services (SIC 68-82)
- Public Administration (SIC 84)
- Education (SIC 85)
- Health and Social Work (SIC 86-88)
- Arts and other service activities (SIC 90-96)

Further information on the SIC definitions for these sectors can be found in Annex A.

In ESS 2022 the largest Maximum Standard Error at sector level was ± 3.75 (Public Administration). Due to the overall reduction in sample size, the largest Maximum Standard Error at sector increased to ± 6.14 (again for Public Administration) in 2024.

Sample sources

As has been the case since ESS 2017, Market Location was used as the principal sample source for ESS 2024, supplemented with 'top up' sample ordered direct from the ONS Inter-Departmental Business Register (IDBR). The IDBR was not used as the primary sample source for ESS 2024 (nor any of the previous iterations of the survey) as the majority of records in the IDBR do not come with a telephone number. To use the IDBR as the primary source of sample would not be desirable since the telematching exercise typically finds a telephone number for a small proportion of the IDBR sample (the match rate was 28% for the 2024 survey).

To determine which IDBR sample records should be requested from ONS, a comparison was made between the 2007 4-digit SIC code counts for the sample received from Market Location and the corresponding IDBR population counts. In cases where specific 4-digit SIC codes were available in the IDBR, but not included in Market Location's sample, either all, or a proportion (depending on volumes) of the IDBR records were requested from ONS. Similarly, in cases where there was a particularly low coverage of Market Location records relative to the IDBR, records were 'topped up' for specific 4-digit SIC codes.

In 2024, around 80 4-digit SIC codes were requested from ONS. For brevity, the 20 most common codes in terms of volumes of records requested have been shown below.

- 7022: Business and other management consultancy activities
- 0145: Raising of sheep and goats
- 6820: Renting and operating of own or leased real estate
- 4711: Retail sale in non-specialised stores with food, beverages or tobacco predominating
- 4941: Freight transport by road
- 7490: Other professional, scientific and technical activities n.e.c.
- 4120: Construction of buildings
- 4520: Maintenance and repair of motor vehicles
- 9602: Hairdressing and other beauty treatment
- 8299: Other business support service activities
- 6202: Computer consultancy activities
- 8891: Child day-care activities
- 8121: General cleaning of buildings
- 8621: General medical practice activities
- 8690: Other human health activities
- 0141: Raising of dairy cattle

- 9609: Other personal service activities n.e.c.
- 5621: Event catering activities
- 4110: Development of building projects
- 8810: Social work activities without accommodation for the elderly and disabled

2024

To assess the sample-to-target ratio required to reach the target number of interviews, in 2024 a logistic regression model was run on IFF fieldwork data from ESS 2022 to model response rates for the 2024 survey. This process determined varying sample-to-target ratios by region, ranging from 4.3:1 in Mid Wales to 9.0:1 in London, where response rates were historically challenging. The ideal average sample-to-target ratio at UK level was 6.1:1. Following some capping due to limitations around Market Location sample availability in specific sample cells, sample was ordered from Market Location at an average ratio of around 6.0:1 against target interviews required.

The final sample-to-target ratios in 2024 are shown in Annex B. A total of approximately 135,000 records were ordered from Market Location for fieldwork (c.134,100 were supplied). A total of approximately 70,500 records were received following the IDBR sample request. These records were checked against the Market Location sample for duplicate records using a combination of company name and postcode. This left approximately 60,100 of the IDBR records eligible for inclusion including some with supplied telephone numbers. Since a large proportion IDBR records received did not include telephone numbers, these were sourced using automated directory look-ups based on company name, address and postcode. Around 58,600 records were run through this process, creating a pool of approximately 16,000 telematched records, from which approximately 8,900 matched records were drawn. A second round of checks for duplicates against the Market Location sample was carried out, this time factoring telephone numbers into the duplication checks, which left approximately 9,700 IDBR records.

All sample records were postcode-validated to ensure that geographical regions had been correctly assigned.

Checks were also undertaken in instances where duplicate telephone numbers existed within the sample. In certain sectors, such as retail and finance, it is common for different sites to appear under the same centralised telephone number. Such sites were marked up on the sample – with the address of the sampled site displayed on-screen – so that interviewers would be aware that the telephone number they were calling was a centralised switchboard and thus they would need to

request to be transferred to a particular site.

In total, 108,950 records were loaded for fieldwork, from the 134,917 usable records that were drawn from Market Location and the IDBR.

2022

In 2022, sample was initially ordered from Market Location at an average ratio of around 5.6:1 against target interviews required. A sample-to-target ratio of around 5.5:1 was targeted in all regions, except for London where a 6:1 ratio was targeted, due to response rates being historically challenging in London.

The 5.5:1 ratio was chosen based of requiring a 5:1 ratio in the ESS 2019 West Midlands RPS trial and adding some contingency. In practice, it was not possible to obtain the desired ratios solely via Market Location (hence the need for IDBR sample). In the Mid Wales region for example, the sample-to-target ratio was only 4.8:1. Due to the availability of sample this varied at sector level from 2.6:1 (Public Administration in Northern Ireland) to 8.4:1 (Construction in London); the lower ratios reflecting the fact that for some quota cells the entirety of available sample was ordered.

As discussed above, due to fieldwork challenges, targets were reduced partway through fieldwork and additional sample drawn from Market Location. The final sample-to-target ratios are shown in Annex B.

A total of c.518,000 records were ordered from Market Location for fieldwork. A total of c.257,000 records were requested from the IDBR. These records were checked against the Market Location sample for duplicate records using a combination of company name and postcode. This left c.233,000 of the IDBR records eligible for inclusion. Since a large proportion IDBR records received did not include telephone numbers, these were sourced using automated directory look-ups (c.34,000 records were successfully telematched from c.185,000 records run through the process). A second round of checks for duplicates against the Market Location sample was carried out, this time factoring telephone numbers into the duplication checks, which left c.65,000 IDBR records.

As in 2024, all sample records were postcode-validated to ensure that geographical regions had been correctly assigned. Checks were also undertaken in instances where duplicate telephone numbers existed within the sample.

In total, 477,069 records were loaded for fieldwork in 2022, from the 582,000 usable records that were drawn from Market Location and the IDBR.

Questionnaire design

Since ESS 2019, the Employer Skills Survey (ESS) and Employer Perspectives Survey (EPS) have been merged in order to provide greater efficiency and to enhance the potential for cross analysis. Merging the surveys in 2019 involved adding many of the questions used in the EPS series to those of the ESS series examining current skills position and skill needs of employers. More information on how this initial merging of ESS and EPS questionnaire content was achieved can be found in the [ESS 2019 Technical Report \(opens in new tab\)](#).

Overall, the content of the 2024 questionnaire largely mirrored that of 2022 in order to maximise comparability and retain the time series for the survey. However, some changes were required to incorporate new areas of policy interest (e.g., AI in all nations, technical education in England, and net zero strategies in Scotland and Wales). For the 2024 survey, fewer interviews were carried out in England, with other nations therefore making up a larger share of interviews than in previous surveys. Given that interviews with the devolved administrations ran at a longer length than England in 2022, this meant several question cuts were required to the 2024 questionnaire to bring the average length back down to 23 minutes. This was, in part, due to the impact of the 2022 module structure, in which a proportion of respondents in England were only allocated to receive the core questionnaire (unlike the other nations). See the Modularisation section for further information. The full list of questions that were removed from ESS 2022 in ESS 2024 can be found in Annex C.

The full ESS 2024 questionnaire will be published alongside the full UK report. The questionnaire was translated into Welsh by a professional translation agency.

Cognitive testing and pilot phase

2024

Due to the scale of the proposed questionnaire changes for the 2024 survey, a selection of new and modified questions were cognitively tested, with the aim of ensuring any proposed changes to the questionnaire were fit for purpose prior to the launch of the pilot. Overall, 20 cognitive interviews were carried out with employers across UK nations and a range of sectors and size bands. Fieldwork was conducted in April 2024. Sample for the cognitive interviews was drawn from a pool of employers who took part in ESS 2022 and agreed to be recontacted for research purposes. Interviews were conducted over Microsoft Teams and administered without computer assistance.

New and amended questions were tested across the following subject areas:

- Emerging technologies – Artificial Intelligence (AI); net zero strategies; and activities which contribute to protecting or restoring the environment
- Recruitment – Recruitment of non-UK nationals, factors considered when recruiting candidates (apprenticeships, modular courses, and Master'/PhDs)
- Technical education (England) – T Levels; Higher Technical Qualifications (HTQs); awareness of Institutes of Technology, the Lifelong Learning Entitlement (LLE), and Skills Bootcamps; and views on the system of apprenticeships and technical qualifications
- Work practices (Northern Ireland, Wales and Scotland) – Ethnicity and disability pay gaps
- Investment in training – 2 existing questions that ascertain the amount paid by employers in levies to training organisations and the amount received in grants from training organisations were retested.

Some key takeouts from the cognitive stage included:

- The low knowledge base of employers with regards to AI and the need to carefully consider what would constitute adoption of AI. Ahead of the pilot a more detailed description was added to support employer comprehension.
- Though employers expressed confidence in their understanding of a question designed to identify 'green sector' employers (i.e. those whose activities contributed to 'protecting or restoring the environment'), employers were interpreting this too broadly and not answering on the basis of this being their main business activity. Ahead of the pilot the wording was changed to encourage respondents to think about their site's main business activity.
- Feedback about the risk of respondent fatigue due to the number of awareness questions in the 'technical education' section. Ahead of piloting, some of the questions originally falling under this section were separated into different modules.
- The recommendation to include an explanation of levies as an 'add if necessary' prompt for the Investment in Training Survey (despite few needing further explanation).

A CATI pilot was conducted in May 2024 to test the suitability of changes made to the questionnaire, and to ensure it flowed well and was of an appropriate length and nature for CATI-based interviewing. A total of 100 CATI pilot interviews were completed among employers across a range of size bands, sectors and modules. Overall, 40 were completed in England, 10 in Northern Ireland, 25 in Wales and 25

in Scotland. As with the cognitive testing stage, the sample was drawn from a list of sites that had taken part in the ESS 2022 survey and at the end of the survey agreed to be re-contacted for research purposes.

The pilot assessed employer understanding of new and modified questions using a combination of feedback gathered from telephone interviewers and findings from listening in carried out on the pilot interviews. Necessary amendments were then made to specific questions; for example, amending the wording of some of the technical education questions, which were perceived to be too 'wordy'; addressing some consistency issues concerning awareness scales; and reordering some questions to improve survey flow.

Another key area of testing during the pilot phase was the interview length. Through pilot testing, the average interview length was 18 minutes and 4 seconds. As the target length of interview was 23 minutes, some questions initially removed to make space were reintroduced in consultation with the DfE and the ESS steering group.

The section below summarises the new questions that were added to the 2024 survey, as well as any question areas that were significantly redeveloped, along with the reasoning behind these changes.

2022

A pilot was conducted between the 17th May and 24th May 2022 to test the suitability of changes made to the questionnaire, and to ensure it flowed well and was of an appropriate length and nature for CATI-based interviewing. A total of 102 pilot interviews were completed among employers across a range of size bands and sectors and module. Overall, 41 were completed in England, 26 in Scotland, 25 in Wales and 10 in Northern Ireland. The sample was drawn from a list of establishments that had taken part in the ESS 2019 and Scottish ESS 2020 surveys and at the end of the survey agreed to be re-contacted for research purposes.

Given the small-scale nature of the changes (mainly deletions), a full-scale cognitive testing phase was not deemed necessary, however some cognitive questions were added at the end of the pilot survey to check overall comprehension and some specifics around respondent understanding of the new questions. This included, for example, a question to check understanding of the description of HTQs.

One key area of testing during pilot surveying was the interview length. Through pilot testing, the average interview length was 24 minutes and 53 seconds. Despite substantial reductions to the questionnaire in the initial design phase to reduce the survey to its target length of 23 minutes, a contributing factor to the extended survey

length was an apparent increase in respondents with vacancies, specifically skill-shortage vacancies (SSVs), which routes a longer version of the survey exploring the causes of SSVs and the skills lacking among applicants. This also bore out in the mainstage survey; weighted results show 23% had vacancies, 15% had hard-to-fill vacancies and 10% had skill-shortage vacancies, compared with 17%, 8% and 5% respectively in 2019 (2019 results do not include Scotland).

Cuts were required to the questionnaire before the mainstage fieldwork launch to bring it in line with the agreed interview length. These cuts were discussed with the DfE and the steering group, to ensure that the most critical elements of the survey were retained. Cuts were largely made to the new questions that were not asked in 2019 but had been added for piloting (e.g., questions on business strategy). Due to challenges in finding a sufficient level of question deletions, further time savings were found by:

- Relocating module proportions so that a larger proportion of respondents received no module
- Adjusting the base at some modular questions (for example, the subset of Module B asked questions on upskilling was reduced further, having already been reduced prior piloting)
- Reducing target sample sizes for the devolved administrations.

All of these changes helped the survey get closer to the target length of 23 minutes; however, the questionnaire still ran over length.

New question areas

2024

Several new questions were introduced for the 2024 survey, which are outlined in Table 2-6.

Table 2-6 Summary of new questions introduced in 2024

Question reference	Question text	Audience
SA14	We are now going to talk about your site's use of Artificial Intelligence, also known as AI. Does your site currently use AI? By AI, we mean machines or software than can imitate human behaviour such as	All employers

problem-solving, learning, playing and communicating.

SA14A	How long has your site been using AI?	All employers
SA14B	Is your site planning to adopt AI?	All employers
SA15	Over the next three years, to what extent do you think AI technologies will become more embedded into your site's processes and operations?	All employers
SA18	The next question may or may not feel applicable, but we need to ask as it could apply to some employers in your sector. Thinking about your site's MAIN business activity, does it involve protecting or restoring the environment? This could include: <ul style="list-style-type: none">• Designing, manufacturing or installing energy efficient products• Activities related to renewable energy, alternative fuels and nuclear power• Tackling environmental challenges• Waste and water management• Conservation, nature protection and restoration	All employers
SA18A	Can I just check, were you thinking about your site's MAIN business activity when answering?	All employers
SA17	The next question is about net zero plans. Which of the following best describes your site's plans in relation to net zero? (This question asks employers whether they are already at net zero, have a strategy in place to reach	Wales and Scotland only

net zero or are planning to put a strategy in place)

NC13NWA	Were any of the skills you mentioned that were lacking among applicants related to an ambition to become more sustainable or carbon neutral?	Employers with skills shortage vacancies
NC21	Thinking about all placements you've had over the last 12 months, were any of the people you took on...?	Wales only
	(This question asks employers for the age groups of the people they have had on placement)	
ND8A	To what extent would you agree or disagree that Further Education (FE) colleges...?	England and Northern Ireland only
	(This question asks employers about FE colleges offering training in skills areas required, offering flexibility around business needs and tailoring content for employers)	
ND8B	To what extent would you agree or disagree that commercial training providers...?	England and Northern Ireland only
	(This question asks employers about training providers offering training in skills areas required, offering flexibility around business needs and tailoring content for employers)	
PD22NW	Are the apprenticeships you offer...?	Scotland only
	(This question asks employers what type of apprenticeship they offer: Modern, Graduate or Foundation apprenticeships)	
PUH1A	Does your site currently offer placements to T Level students?	England only
NC29A	How easy or difficult is it for your site to offer T Level placements?	England only
NC30A	Does your site currently fund or arrange HTQs for	England

	new or existing staff?	only
NC35	How interested would your site be in funding or arranging HTQs for new or existing staff?	England only
NC36	I'd now like you to think again about the factors your site looks for in candidates when looking to recruit new employees. For each factor that I read out, please say if it is critical, if it is a significant factor, if you place a small amount of value on it, or if it has no value for your site? (This question asks employers about different kinds of technical qualifications: T Levels, HTQs and other technical qualifications)	England only
NC37	I now have a question about Institutes of Technology. Institutes of Technology deliver higher technical education from Level 3 T Levels to Level 7 Master's degrees. They specialise in Level 4 and 5 technical skills including HTQs and degree apprenticeships. Before today, which of the following would have best described your awareness of Institutes of Technology?	England only
NC39	Which of the following best describes your site's view on the system of apprenticeships and technical qualifications? (This question asks employers for their view on the number of technical qualifications available)	England only
NC40	Is this because...? (This question asks employers why they think there are not enough technical qualifications available)	England only
NC38	I now have a question about the Lifelong Learning Entitlement, also known as the LLE, which will replace the student finance system for post-18 education. It will allow learners to study more flexibly	England only

and enable employers to address skills gaps. Employers will be able to collaborate with educational providers to co-design modules to meet their skills needs. Before today, which of the following would have best described your awareness of the LLE?

NC41	Skills Bootcamps are flexible training courses for adults aged 19 and over. They last up to 16 weeks and offer participants a job interview on completion. Before today, which of the following would have best described your awareness of Skills Bootcamps?	England only
------	---	--------------

As shown in Table 2-6, an additional question was introduced to identify whether their site's main business activity involved protecting or restoring the environment (SA18). During the cognitive and pilot testing stages, there was some confusion among employers as to what constituted protecting and restoring the environment. To address this, a list of relevant business activities was added to this question to provide further clarity ahead of mainstage fieldwork. In addition, a check question was added to confirm the employer was answering based on the site's main business activity. Despite these refinements, monitoring of this question in the early stages of mainstage fieldwork suggested that this question was being misinterpreted and that some employers were answering 'yes' even when protecting and restoring the environment did not appear to be their main business activity. For this reason, the results are not included in the published data.

Other notable changes

- 'Artificial Intelligence (AI) skills' was added to the list of IT skills options (NC13A, ND11A and NE3A).
- An existing question which asked employers with hard-to-fill vacancies whether they have recruited, or tried to recruit non-UK nationals in order to fill these vacancies was amended for the 2024 survey (SC15B). Response codes at this question were amended to differentiate between non-UK nationals who were already living in the UK, non-UK nationals who planned to move to the UK for the job, or non-UK nationals who would remain living overseas.
- At PC5, more factors that employers might look for when recruiting new employees were added. These additional factors were candidates having completed apprenticeships, relevant modules or short courses (asked of England only) and a Master's degree or PhD (asked of Northern Ireland only).

- While questions on skills utilisation and High Performance Working (HPW) remained largely the same as in 2022, 2 new iterations were added to the question which asks about workplace practices (SG1). These included asking employers in Northern Ireland, Wales and Scotland whether they publish their ethnicity and disability pay gaps. These were only asked of employers with more than 10 employees. In 2022, to be classed as a ‘HPW employer’ sites needed to meet 7 of the 11 HPW measures. In 2024, there were 10 HPW measure asked of sites, though the threshold for being a ‘HPW employer’ remained at 7 measures.
- In 2024, use of the word “establishment” was changed to “site” throughout the survey to ensure consistency in terminology throughout the questionnaire.

2022

The content of the 2022 questionnaire largely mirrored that of 2019. However, some changes were required for the following reasons:

- To reintegrate Scotland into the survey.
- Ensuring topical issues are covered in outcome codes (e.g., relating to COVID-19).
- To cover new areas of policy interest (e.g., Higher Technical Qualifications).

The full list of questions that were removed from ESS 2019 can be found in Annex D.

New topical questions / precodes

Throughout the questionnaire, where appropriate new pre-codes were added related to COVID-19, where this likely had an impact on recruitment and training activities. For example, at SC11A where information is collected on the causes of hard-to-fill vacancies, three new pre-codes were added: ‘COVID-19 has limited the availability of candidates’; ‘COVID-19 has hindered the recruitment process’; and ‘Brexit has made it more difficult to recruit EU nationals’.

A new question was also added that asked employers that had provided online training or e-learning to staff whether this was a replacement for some or all of the face-to-face training they would have provided if COVID-19 had not happened, or whether it was training they would have undertaken anyway (SSF7C). This question was first asked in Scottish ESS 2020 and is only asked of Scotland and Northern Ireland in the 2022 survey.

Scotland-specific questions

New questions were included asking employers whether they had heard of the

Developing the Young Workforce (DYW) Regional Groups, and whether establishments had any engagement with these (SPC28 and SPC29). DYW and other Scottish initiatives such as the Young Person's Guarantee, were also added as pre-coded responses, one example being at question PC20, which asked establishments their main reasons for offering work placements or internships, with 'approached by a DYW Lead or Regional Group' and 'signed up to the Young Person's Guarantee' added as unprompted pre-codes.

There were also Scotland-specific versions of existing questions added to the questionnaire. This included a set of questions asking employers whether they had recruited people to their first job from a Scottish secondary school, a Scottish College, or a Scottish University and follow up questions about their preparedness for work and, if applicable, the ways in which they had been poorly prepared (SPC10E, SPC10F, SPC10G). These are similar to the existing questions for employers in England, Northern Ireland and Wales about their education leaver recruits (PC10B, PC10C, PC10D).

Another example like this is the addition of SSF13, which asked employers in Scotland the level of qualification that staff had trained towards. The Scottish-specific qualification descriptions were taken from Scottish ESS 2020. In ESS 2017, employers in Scotland received the same question as England, Northern Ireland and Wales but with Scottish-specific text substitutions, though the descriptions and examples were less detailed than in the version used in Scottish ESS 2020 and ESS 2022.

New policy areas

Questions were added to cover awareness of T-levels (PUH1); this question originated from the 2021 Employer Pulse Survey. Note, ESS 2019 had already asked employers whether they would be interested in providing work placements to T-level students and about their capacity to offer them (NC28 and NC29). These questions were retained for the 2022 survey. There was also a new question asking employers about their awareness of Higher Technical Qualifications (HTQs), a new quality mark for a subset of Level 4 and 5 technical qualifications approved by a panel of employers (NC30).

Questions about skills lacking among applicants and the existing workforce

While questions asking about skills lacking among applicants and the existing workforce were largely kept the same, the technical skills lists were updated with a prompted code, 'creative and innovative thinking' (SC13A, SD11A, SE3). This code was first introduced in Scottish ESS 2020.

A new question was also added to ESS 2022, which asked all employers that had mentioned at least one specific skill lacking among staff with skills gap to check whether any of those mentioned related to wanting to be more sustainable or carbon neutral (ND11NWA).

Welsh language apprenticeship delivery questions

Two new questions were asked of employers in Wales. The first, asked those with current apprentices whether any of these apprentices undertake their qualifications through the medium of Welsh or bilingually. The second asked employers in Wales more generally, whether their establishment would benefit from a wider range of qualifications being made available through the medium of Welsh or bilingually.

Visas for staff who ordinarily reside outside of the UK

A question was added for employers in Wales asking whether they currently have any staff who are ordinarily resident outside the UK and currently working in the UK on a visa. Those who did have these staff were also asked whether their organisation was actively sponsoring visas for staff at their site (ND42, ND43).

High performance working practices

For employers in Northern Ireland, Scotland and Wales, questions were reintroduced asking employers about their high performing working practices, such as whether they have equal opportunities policies or conduct training needs assessments. These employers were also asked whether staff have variety in their work, discretion over how they do their work and whether they have access to flexible or hybrid working arrangements (SG1, SG5). These questions were last asked UK-wide in ESS 2017 and more recently in Scottish ESS 2020.

In total, employers were asked about 10 high performance work practices.

Other notable changes

Wording was adapted to a long-running question asking employers whether they provide off-the-job training. The changes aimed to tighten up the wording and align with the UK Department for Education's definition used to determine whether apprentices are meeting off-the-job training minimum funding requirements. This includes specifying, for example that off-the-job training should take place beyond training which takes place as part of an employee's normal work duties and that it can take place anywhere. The question was first trialled in the 2021 Employer Pulse Survey.

Online occupational prompts (2022 and 2024)

In order to allow assessment of skill needs at an occupational level, a key element of the Employers Skill Survey series is a set of questions that asks employers to assign the employees at their site into 9 different occupational categories ranging from Managers, Directors and Senior Officials through to Elementary Occupations. In 2024, as in recent waves of ESS, a set of occupational prompts, providing detailed examples of the types of job roles to be included in each occupational grouping, was created and hosted online by IFF Research under the domain name www.skillsurvey.co.uk/jobs. The occupational prompts were tailored to give pertinent, specific examples relevant to each broad sector classification (as provided by the respondent earlier in the interview). A link to the online prompt card was offered to sites with 10 or more employees. For employers that opted against accessing the online occupational prompts live during the interview, the occupational descriptions and example job roles were read out by interviewers. It is important to note that these prompts were not used in the recruitment section of the questionnaire, where employers are asked for up to 6 occupations in which they have vacancies. In that section, employers were asked which occupations they were recruiting for; these verbatim responses were then coded to SOC2020 codes.

The example job lists for each occupation were kept the same as 2022. The full list of prompts used can be viewed at the end of the ESS 2024 questionnaire which will be separately published alongside the UK report.

Interview length

The average overall interview length in 2024 was 22 minutes (1 minute shorter than 2022 on average). This varied between different employers depending on their recruitment activities, experience of skill-shortage vacancies, internal skills gaps, and training activities.

As shown in Table 2-7, interviews with larger sites took longer on average given that they were more likely to have trained their staff and to have experienced skill-shortage vacancies and/or skills gaps given their greater number of employees.

Table 2-7 Average interview length by size of site, module and nation

Size of site	Average interview length in 2022	Average interview length in 2024
--------------	----------------------------------	----------------------------------

2 to 4	20 minutes	17 minutes
5 to 9	21 minutes	20 minutes
10 to 24	24 minutes	23 minutes
25 to 49	26 minutes	26 minutes
50 to 99	29 minutes	28 minutes
100 to 249	31 minutes	32 minutes
250 or more	33 minutes	34 minutes
Module	Average interview length in 2022	Average interview length in 2024
Module A	23 minutes	22 minutes
Module B	25 minutes	23 minutes
Module C	24 minutes	21 minutes
Module D	28 minutes	22 minutes
Module E (Module E was blank, i.e. those selected for this module received no additional questions)	20 minutes	N/A
Nation	Average interview length in 2022	Average interview length in 2024
England		22 minutes
Northern Ireland		22 minutes
Scotland		23 minutes
Wales		22 minutes

Modularisation

As was the case since the 2019 ESS, large sections of the survey were modularised to ensure that ESS and EPS legacy questions could be covered without adding significantly to interview length. The number of modules were reduced from 5 in ESS 2022 to 4 in ESS 2024. In ESS 2022, there were only 4 'active' modules, with a portion of employers in England allocated to Module E excluded from modular questions in order to meet the target average interview length. Due to the sample size reduction in England and the need to maximise module sample sizes, the decision was taken to apply the same modular split as for other nations in 2022 – i.e. 25% allocated to each of the 'active' modules A to D, so that every respondent went through a single modular set of questions.

In 2024, sites were randomly allocated to 1 of the 4 modules, which are detailed below:

- Module A – Apprenticeships, under-utilisation of skills and upskilling, LLE and Skills Bootcamps (England only)
- Module B – EPS Training, work experience placements and work inspiration activities, under-utilisation of skills and upskilling, external training and vocational qualifications (for NI/Scotland only)
- Module C – Factors considered when recruiting, education leavers, and Developing the Young Workforce (Scotland only)
- Module D – skills utilisation, Technical education (England only), and high performance working (NI, Wales and Scotland only)

The sample was distributed equally among the 4 modules with no differences by nation, as shown in Table 2-8. In ESS 2022, sites were instead randomly allocated to 1 of 5 modules, while only businesses in England were assigned to Module E. This meant that the target module distribution for England differed from the devolved administrations, as shown in Table 2-9.

Table 2-8 Target module distribution for ESS 2024

Module	Module A	Module B	Module C	Module D
--------	----------	----------	----------	----------

Overall sample distribution	25%	25%	25%	25%
------------------------------------	------------	------------	------------	------------

Table 2-9 Target module distribution for ESS 2022

Module	Module A	Module B	Module C	Module D	Module E
Sample distribution (England)	17%	17%	17%	17%	32%
Sample distribution (devolved administrations)	25%	25%	25%	25%	n/a

The full final 2024 questionnaire with interviewer briefing notes will be published separately on the DfE GOV.UK website alongside the full UK report.

Fieldwork

In 2024, a total of 22,712 interviews were conducted by telephone using computer-assisted telephone interviewing (CATI) systems. For the 2024 survey, fieldwork was conducted by IFF Research only, unlike in previous years when fieldwork was shared between IFF Research and 2 other research agencies – BMG Research and Ipsos.

The number of interviews completed by nation in 2024 were:

- England: 8,639
- Northern Ireland: 3,388
- Scotland: 5,080
- Wales: 5,605

The number of interviews completed by nation in 2022 were:

- England: 59,486
- Northern Ireland: 3,400

- Scotland: 5,207
- Wales: 4,825

Sites were not pre-notified that they would be called for the survey, partly due to financial considerations and partly because it was felt that this could lead to a reduction in response rates if head offices potentially opted all the sites in their organisation out of the survey.

In previous waves of ESS, contacts for large multisite organisations (defined in ESS 2022 as those with 300 or more sites for the 2022 survey) were split across a number of sample batches and released sequentially over the course of fieldwork to ensure that the various sites were not contacted within too short a time window. Due to the reduced sample for the 2024 survey, such an approach was not necessary and these sites were retained in the main sample batches rather than released sequentially.

In 2022 each agency was allocated separate regions for fieldwork. Due to resourcing challenges that emerged during fieldwork, IFF and Ipsos also conducted some interviews in the regions originally allocated to BMG Research. As noted above, IFF Research also interviewed large multisites across the whole of the UK. Table 2-10, Table 2-11 and Table 2-12 detail how the interviews broke down between the three research agencies.

Table 2-10 Interviews achieved by BMG per region in 2022

Region	Number of interviews	Total number in region	Proportion completed
East Midlands	18	6,198	0.3%
East of England	3,625	6,743	53.8%
London	13	7,428	0.2%
North East	4	4,793	0.1%
North West	3,133	6,321	49.6%
South East	23	9,045	0.3%

South West	3,949	6,766	58.4%
West Midlands	3,081	5,817	53.0%
Yorkshire and the Humber	9	6,375	0.1%
Northern Ireland	0	3,400	0.0%
Scotland	5	5,207	0.1%
Wales	8	4,825	0.2%

Table 2-11 Interviews achieved by IFF per region in 2022

Region	Number of interviews	Total number in region	Proportion completed
East Midlands	182	6,198	2.9%
East of England	2,421	6,743	35.9%
London	7,394	7,428	99.5%
North East	136	4,793	2.8%
North West	2,334	6,321	36.9%
South East	356	9,045	3.9%
South West	2,279	6,766	33.7%
West Midlands	1,877	5,817	32.3%
Yorkshire and the Humber	120	6,375	1.9%
Northern Ireland	3,399	3,400	100.0%
Scotland	5,202	5,207	99.9%

Wales	4,816	4,825	99.8%
-------	-------	-------	-------

Table 2-12 Interviews achieved by Ipsos per region in 2022

Region	Number of interviews	Total number in region	Proportion completed
East Midlands	5,998	6,198	96.8%
East of England	697	6,743	10.3%
London	21	7,428	0.3%
North East	4,653	4,793	97.1%
North West	854	6,321	13.5%
South East	8,666	9,045	95.8%
South West	538	6,766	8.0%
West Midlands	859	5,817	14.8%
Yorkshire and the Humber	6,246	6,375	98.0%
Northern Ireland	1	3,400	0.0%
Scotland	0	5,207	0.0%
Wales	1	4,825	0.0%

A comprehensive set of interviewer briefing notes were created for interviewer use and training, and the DfE team attended the initial interviewer briefing at IFF Research. The briefing lasted around 90 minutes and all of the interviewers that were due to work on the survey were required to attend 1 such briefing prior to them starting work on the survey. In 2022, a member of the IFF team attended the briefings conducted by each agency. Answers to any questions raised were shared with all three interviewing teams. Quality assurance on the interviewing was carried

out by IFF at each of the research agencies, and DfE and IFF attended interviewer briefing sessions at all contractors, providing full feedback post-session which was also shared with all contractors.

Interviews were conducted with the most senior person at the site with responsibility for recruitment, human resources and workplace skills. Reassurances were provided to respondents prior to the survey, including confirmation that data would be reported in a way that would not allow them or their organisation to be identifiable. If after the first contact the respondent or gatekeeper wanted more information about the survey a reassurance email was sent (see Annex F for a copy of the reassurance email). This reassurance email included a link to the dedicated survey website which was created and hosted by IFF Research (<https://www.skillssurvey.co.uk> (opens in new tab)). This website provided further background information on the research, links to the 2022 results, and a list of frequently asked questions.

Following the COVID-19 pandemic, many employers have continued with homeworking, creating further practical challenges around administering the survey. With many switchboards unable to transfer interviewers to the correct respondents, processes were introduced for the 2022 survey to collect email addresses for homeworking respondents, which were continued in the 2024 survey. Once the email address was collected, invites were sent offering respondents the opportunity to leave their telephone number to arrange a call back. The email invite is shown in Annex G.

For ESS 2024, fieldwork took place from 24th June 2024 to 31st January 2025. For ESS 2022, fieldwork took place from 20th June 2022 to 30th March 2023. In 2022, this included an extension of three months due to challenges faced during fieldwork. Weekly progress updates were produced by IFF Research, to monitor progress throughout the fieldwork period.

Approach to large banks in 2024

In previous ESS and EPS surveys there have been specific issues when contacting branches of large banks. Blanket refusals at head office level on behalf of all sites for particular large banks has diminished the representativeness of the findings within the sector in previous studies. A related challenge is that the telephone numbers supplied by commercial sample providers are typically centralised telephone numbers, rather than telephone numbers for the specific branches sampled, and subsequently fieldwork contractors have been unable to easily navigate to the correct sites.

In order to encourage their participation, head offices were contacted by members of the DfE team prior to the survey commencing to ask if they would take part in interviews to discuss any perceived barriers to participating in the survey. During these interviews, head offices were also asked if they would be willing to provide telephone numbers at branch level / interviewees who could answer at branch level for sites included in the sample drawn from the Market Location database.

IFF Research conducted the qualitative discussions with representatives of large banks, which found that they had 2 key concerns:

- The time commitment required by branch managers to complete the survey; and
- Individual branches being able to answer accurately and misrepresent the position of the wider organisation, particularly as many recruitment and training decisions were taken centrally at head office level.

Overall this exercise was unsuccessful in persuading large banks to allow their branches to participate in ESS 2024 as none of the large banks identified were willing to provide branch contact details with the survey remaining in its current guise. These challenges have had implications for the data. For example, in 2024 there are some limitations around the reporting of Financial Services in Scotland – see the ‘Employment Adjustment Weight’ section for more information.

Response rate

High response rates are central to the success of the Employer Skills Survey. The overall response rate for the survey in 2024 was 65% (compared with 53% in 2022), calculated as ‘achieved interviews’ as a proportion of all respondents who started the survey. Table 2-13 provides a detailed breakdown of survey outcomes in 2024. Table 2-14 provides the breakdown for 2022.

Table 2-13 Sample outcomes and response rate in 2024

Outcome	Number of contacts	% of all sample	% of complete contacts
Total sample	108,950	100%	
Ineligible sites (e.g., just 1 working proprietor at site)	1,955	2%	

'Live' i.e., records for which a final outcome (refusal, completed interview etc.) was not reached.	19,361	18%
Unobtainable / invalid numbers	16,308	15%
Withdrawn after completing RPS protocol	36,472	33%
Total complete contacts	34,854	32%
Achieved interviews	22,712	21%
Respondent refusal	11,581	11%
Quits during interview	561	1%
		100%

Table 2-14 Sample outcomes and response rate in 2022

Outcome	Number of contacts	% of all sample	% of complete contacts
Total sample	477,069	100%	
Ineligible establishments (e.g., just 1 working proprietor at site)	14,033	3%	
'Live' i.e., records for which a final outcome (refusal, completed interview etc.) was not reached.	18,235	4%	
Unobtainable / invalid numbers	74,957	16%	
Withdrawn after completing RPS protocol	231,515	49%	
Total complete contacts	138,329	29%	100%
Achieved interviews	72,918	15%	53%

Respondent refusal	61,948	13%	45%
Quits during interview	3,463	1%	3%

The sample required to achieve the completed interviews for ESS 2024 (4.8:1) was lower than seen in previous years. In ESS 2022 a ratio of 6.5:1 was achieved, though there were associated challenges encountered with fieldwork during this period, including it being more difficult to get hold of respondents. In ESS 2019 the ratio was 7.4:1, though this was when a quota sampling approach was used, which meant sample could be withdrawn once a quota had been achieved.

Annex B shows the actual sample ratio required to reach the achieved number of interviews by size, sector and region, from the total sample available during fieldwork.

Annex B also shows the areas where it was not possible to reach the original ideal targets in the fieldwork period.

Annex H shows how the achieved response rate differed by nation, size and sector.

Data edits

It was recognised at the outset that the ESS questionnaire involved the collection of some complex data that respondents would possibly struggle to answer. There was also, despite stringent quality control, the chance that interviewers may enter typing errors, for example accidentally entering extra zeros on the end of numerical variables.

Data checks were built into the CATI script to ensure, for example, that questions breaking down the workforce by occupation equalled the number of people working at the site, and that the number of staff in each job role who were not proficient could not exceed the number of staff they had in each job role. However, some data validation needed to occur after fieldwork had finished to ensure no errors were present in the final data. Some records were removed from the data; for example if particular employers were miscategorised and therefore routed to the wrong questions. Criteria for editing data to ensure consistency can be seen in Annex J.

Coding

Open ended responses to the survey were coded by the in-house coding team at IFF Research in 2024 and the contractors' coding teams in 2022. Throughout fieldwork, a series of interim coding checks were carried out to check for consistency and quality. The final codeframe was then reviewed after fieldwork was completed. In 2022, codeframes were developed in unison and regularly compared and reviewed. As lead contractor, IFF Research took the final decisions as to what codes to use after considering advice and outputs from the IFF, BMG and Ipsos coding teams.

Standard Industrial Classifications (SIC) were coded using 2007 standards (the most up to date at the time of the survey), and Standard Occupational Classifications (SOC) were coded using 2020 classifications (also the most up to date). This was the first ESS where SOC 2020 classifications were used to code to occupations, however ESS 2022 has been retrospectively coded to SOC2020 to allow time comparisons in ESS 2024 reporting. It should therefore be noted that occupational data for 2022 will differ slightly between the ESS 2022 and ESS 2024 reports.

Weighting

The survey weighting was adapted in 2024 to account for the significantly lower sample size in England and to provide a consistent framework for all countries and subregions, at a reasonable level of granularity. For the unit-based weights (used for analysis of the number or proportion of establishments), Northern Ireland and Scotland were weighted independently, while weighting was designed at the regional level in England (and combined to report national results for England). Due to Welsh regional reporting requirements, Welsh regions were weighted independently. Due to challenges around the reduced sample size, a different approach was taken for employment-based weights (used for reporting the proportion of employees – e.g. volume measures for skill-shortage vacancies, skills gaps, etc):

- Due to low sample sizes in the 250 employees or more sizeband, the 100 to 249 and 250 or more sizebands were collapsed into a single, 100 or more category to strengthen the robustness of cells in the upper size band and reduce zero cells. Therefore for employment-based weights (e.g. EMPWEIGHT), the combined 100 or more employees sizeband must be used for reporting.
- Unlike for the unit weighting design where English regions were balanced, the employment weight was applied at England level only. The sample sizes were too small for the English regions for the 100 or more employees cells to make robust and stable estimates of employment at that level. Separate, additional weights were created to allow employment level analysis for English regions (see the Local geography weights for further information). This means, unlike in 2022, the

EMPWEIGHT variable in the dataset used for employment-based analysis should not be used for England region analysis.

Further information about these changes can be found in the Employment Adjustment Weight section.

Best practice weighting for an RPS sample was followed, developing the approach introduced in 2022. The process of weight creation was cumulative in that each new stage of weighting builds on further weights previous stages, using the previous stage as an input weight with each stage falling into 1 of the following categories:

1. Selection weighting, to correct for the different probabilities of business units being in the 'issued' sample / specific modules / and specific question sets. Its purpose is to ensure that the profile of selected cases closely match that of the population.
2. Non-response weighting, to correct for different probabilities of business units completing an interview. Its purpose is to ensure that the profile of completed interviews closely matches that of the 'selection weighted' sample.
3. Other adjustments, to ensure that estimates obtained accurately represent the profile of the known population. The use of Random Iterative Method (RIM) weighting (where the model iteratively calculates the best fit to match the sample to the population profile) and the redistribution of employees in cells with no productive interviews fall into this category.

Survey data was weighted and grossed to the total population of establishments and total population of employees, according to the most recent IDBR – the latest available business population statistics published by ONS at the time that weighting was carried out.

Given that the ESS data were intended to be used in a variety of ways (UK establishment and employment-based level, down to similar measures at a regional and local level), a number of different weights were produced:

- Core weights, used to weight the combined UK dataset and used for the majority of analysis. This weighting set is the default to use.
- Modular weights, to be used when analysing data from questions within 1 of the 4 modules business units were allocated to.
- Modular combination weights, to correct for regional under- and over-sampling in the Underutilisation and Upskilling sections, asked across 2 modules where 1 of these modules restricted these sections to only Scotland and NI.
- Local weights for use analysing England data by UTLA and MSA.

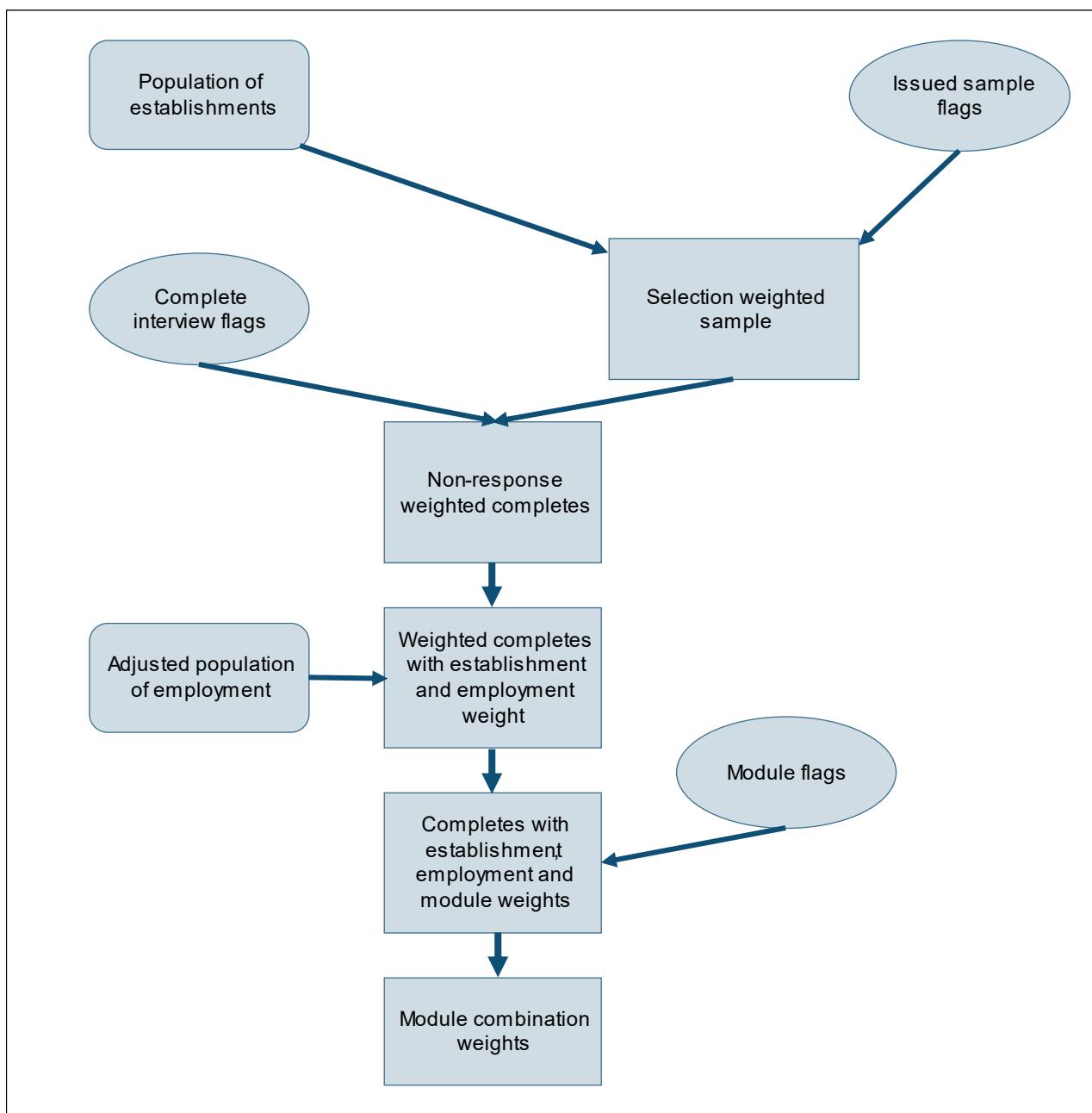
- Two-digit SIC weights for use when analysing at two-digit SIC level.

Data dictionary files were created listing each variable with notes and guidance on the correct weight to use.

Summary of weighting stages

The various stages of weighting described above are summarised in Figure 2-1, with each new weight calculated using its previous weights as a composite starting weight. A composite weight at any stage is the product of the weight at that stage with the weight at all previous stages.

Figure 2-1 Flow Diagram summarising weighting stages



Sample Data and the IDBR Population

A database was collated for ‘issued sample’ containing key variables used in the weighting process, containing sector, sizeband, region, number of employees, UTLA, local authority and SIC two-digit code. Where productive (completed) interviews were obtained but the information provided in the survey conflicted with the information held for that record in the original sample, precedence was given to the version of the sector, sizeband, region and employment variables captured in the survey. At their highest levels of granularity, these variables were banded using the categories in Annex J.

The 2024 IDBR population data, used for estimating the population of business by establishment and employment was organised into cells by sector, sizeband and region. At the highest level of granularity (Annex J) there were 1,365 possible cells (13 sectors x 7 sizebands x 15 regions). Due to the much reduced sample size in ESS 2024 and for the purpose of initial cell weighting (the first stage of selection weighting), these cells were further collapsed to 450 cells (6 sector x 5 sizeband x 15 region), using the categories in Table 2-15 and Table 2-16 (for the 15-region breakdown, no collapsing was required – the categories are shown in Annex J).

Table 2-15 Collapsed IDBR categories used for cell weighting for units (sector)

Description	Categories of original variable included
Primary Sector & Utilities	1
Manufacturing	2
Construction	3
Trade, Accommodation and Transport	4, 5, 6
Business and Other Services	7, 8, 9, 13
Non-Market Services	10, 11, 12

Table 2-16 Collapsed IDBR categories used for cell weighting for units (size)

Description	Categories of original variable included
2 to 4 employees	1
5 to 9 employees	2
10 to 24 employees	3
25 to 99 employees	4
100 or more employees	5

The rationale for this is described further in the next section but means that in 2024 it is no longer necessary to adjust the IDBR population prior to weighting.

Theoretically, a small adjustment may have been needed to the IDBR establishment population to account for cells that were sampled, but which according to the IDBR had zero population. This possibility arises from giving precedence to sector, sizeband and regional information from the survey, which sometimes resulted in establishments being reallocated to cells which according to IDBR have no establishments. In 2022, for these cells, a population of one business unit was assigned. No adjustments were made to the employment field, as in these cases the survey estimate of employment was used as the best estimate of employment per unit. However, this adjustment was not necessary in ESS 2024.

In 2022, of the 1,365 possible cells ($13 \times 7 \times 15$) there were 19 which were not sampled, all in the Welsh regions, and mainly in Mid-Wales. To enable creation of selection weights, the IDBR population of units and employment was adjusted for these missing cells. The populations of these missing cells were reallocated within the same sizeband by region of the universe grid, proportionally to its industry sector distribution. The population for cells not sampled was distributed among the industry sectors with at least one unit of sample in the Sizeband by Region domain.

Selection weights

Different sampling probabilities were used for establishments in every sector by sizeband by region cell to enable minimum numbers of interviews to be achieved, according to ideal targets agreed with DfE. Therefore, the issued sample over-represents establishments cells that were over-sampled relative to their share of the population. For example, organisations with larger numbers of employees were over-represented relative to those with small employees; establishments in

Wales/Scotland and Northern Ireland were over-sampled relative to their population. Selection weighting is designed to address this bias and ensure the distribution in the issued sample matches that of the IDBR adjusted population.

In 2022, a selection probability for business units was calculated for each sector by sizeband by region cell by dividing its number of establishments in the issued sample by its number of establishments in the adjusted IDBR population. The selection weight was calculated as 1 divided by the selection probability and was scaled to sum to the total population of business units across the UK for profiling purposes. Profiles show the selection weighted sample exactly replicated the adjusted IDBR population by sector, sizeband and region.

However, due to the much-reduced sample size in England, the selection weighting process needed to be modified in ESS 2024. It was not possible to cell weight at the (13 x 7 x 15) level within English regions as in 2022. Neither was it desirable to make the large adjustments to the IDBR target population needed to cell weight at this level for other nations (and Welsh regions), given the need to retain a consistent approach across all regions which leaves the target population intact.

Therefore, selection weighting was broken into 2 stages:

1. Cell weighting, though at a broader level than ESS 2022 (See Table 2-15 and Table 2-16)
2. RIM weighting of the issued sample after cell weighting (using the cell weight as a starting weight) to give a more granular representation of the full sector bands (x13) and full sizebands (x7) at regional level

The rationale behind this was to ensure that the issued sample for the 9 English and 4 Welsh regions, Scotland and Northern Ireland were broadly cell weighted to the highest level of granularity possible, then adjusted to be representative at the highest level of granularity possible both for sector and establishment size at nation level for Northern Ireland and Scotland and regional level for England and Wales.

Cell Weighting

In 2024, a selection probability for employer units was calculated for each (6 x 5 x 15) sector by sizeband by region cell (Table 2-15 and Table 2-16) by dividing its number of establishments in the issued sample by its number of establishments in the adjusted IDBR population. The Cell Weight was calculated as 1 divided by the selection probability and was scaled to sum to the total population of establishments.

RIM Weighting

Using the Cell weights as inputs, scaled to their population totals for each region, the targets used for RIM weighting the issued sample to the IDBR population are shown in Table 2-17 and Table 2-18:

Table 2-17 RIM targets used for second stage of selection weighting, using cell weights as inputs - England (2024)

RIM target	Granularity
Sector	All 13 (Annex J)
Sizeband	All 7 (including 250 or more employees) (Annex J)
Region by Sector_c6	9 English regions by 6 collapsed sectors (Table 2-15)
Region by Sizeband_c5	9 English regions by 5 collapsed sizebands (Table 2-16)

Table 2-18 RIM targets used for second stage of selection weighting, using cell weights as inputs – NI, Scotland and Welsh regions (2024)

RIM target	Granularity
Sector	All 13
Sizeband	All 7 (including 250 or more employees)
Sector_c6 by Sizeband_c5	6 collapsed sectors by 5 collapsed sizebands

The RIM weighting converged perfectly, giving the granularity in the issued sample described above for single and pairwise combinations of sampling variables.

A composite weight was created from the Cell Weights combined with the additional RIM Weight to give the final Selection Weight.

Profiles show the selection weighted sample replicates the IDBR population of establishments by each of sector, sizeband and region (at full granularity: 13 sectors, 7 sizebands, 15 regions - 9 English region, NI, Scotland and 4 Welsh

regions) and approximates all two-way combinations. Sector by region and sizeband by region almost perfectly replicate the IDBR population; sector by sizeband has some small distortions due to sparsity in the sample.

Non-Response Weights

The probability of a sampled establishment completing the survey depends on its profile by sector, sizeband and region. Without further adjustments beyond the sampling weight, the profile of complete interviews would over-represent establishments in categories of variables with higher completion rates and under-represent those in categories with lower completion rates. Non-response weights are designed to address this potential source of bias.

Logistic Regression modelling was used to predict the probability of employer units completing an interview given sector, sizeband and region and two-way combinations of these. This was the same technique used as was used in 2022, though different predictors for the model were selected based on several iterations of screening. Decisions were also made to combine categories of these variables with low single and two-way combination base sizes of 'completes' to ensure sufficient base sizes for modelling.

The final model incorporated as much granularity as possible. For interactions there was a need to collapse and combine levels of some variables due to sparseness in the sample. The model included the following terms:

Table 2-19 Final variables in non-response weighting model – main effects (2024)

Variable	Granularity
Sector	All 13 (Annex J)
Sizeband	All 7 (Annex J)
Region	All 15 (Annex J): 9 English Regions, NI, Scotland and 4 Welsh Regions

Table 2-20 Final variables in non-response weighting model – interactions (2024)

Variable	Granularity
-----------------	--------------------

Region by Sector_c10	10 Sector categories merging: (a) Information & Communication with Financial Services; (b) Public Admin, Education, Health & Social Work into “Non-market Services”; (c) keeping all other sectors separate
Region by Sizeband_c6	6 Sizeband categories merging: 100 to 249 and 250 or more employees, and keeping all other bands separate
Sector_c10 by Sizeband_c6	As defined above
Sector_c4 by Emp250	<p>Sector: Collapsed to (1) Primary, Manufacturing and Construction, (2) Trade, Accommodation and Transport, (3) Business and Other Services, (4) Non-Market Services</p> <p>Sizeband: collapsed to 250 or more employees vs. all smaller sized (2 to 249 employees)</p>

Using this final model, the probability of completing the survey was scored for each establishment in the sample, conditional on its predictor categories. For cases in the complete sample, a non-response weight was calculated as 1 divided by the probability of completion. Trimmed versions of this weight were also created for evaluation. Trimming reduces the number of extreme weights, whilst maintaining the weights ability to minimise much of the bias of the original weight. The benefit of a trimmed weight is greater weighting efficiency which translates into higher effective sample size.

A composite weight was created from the untrimmed and trimmed versions of the non-response weight by multiplying them by the corresponding selection weight from the previous stage. The sum of the weights was rescaled to the population total for establishments and profiles were run for sector, sizeband, region and all of their two-way combinations to evaluate against the IDBR population data. In 2024, the decision was made to adopt a version of the non-response weight without any trimming, to maximise bias reduction. However, in 2022, the non-response weight was trimmed 1% at its highest and lowest end. A composite ‘core’ unit weight (UNITWEIGHT) was created from the product of this non-response weight and the selection weight.

This ‘core’ weight is used as the default weight for analysing frequencies of

employer sites for questions in the core section of the questionnaire.

Employment Adjustment Weight

When using the core unit weight for analysis, the estimates of total number of employees by sector, size and business do not always tally with the IDBR employment population. This is most apparent for business units with 100 or more employees that on average only report two-thirds of the expected number of employees. The purpose of the employment adjustment weight is to adjust for this discrepancy by cell. Its effect is to adjust the average number of employees per unit to a value that, combined with the core unit weight, will approximately replicate the known IDBR population for employment by cell.

Given the sparsity of coverage by sector for the 250 or more sizeband and within the English regions across all sizebands in 2024, this adjustment was applied to England as a whole (without adjusting English regions individually this time) as well as NI, the 4 Welsh regions and Scotland. Across all regions the top 2 sizebands were combined into a 100 or more sizeband. Further merges by sector were considered but not implemented to retain the ability to conduct employment level analysis for all 13 sector categories. Due to this merging, the largest sizeband for employment-based analysis is 100 or more employees for ESS 2024. This grouping will be made available for historic data in the Official Statistics publication, to enable comparisons of results over time.

The merging to England level (ignoring English regions) and (for England, NI, the Welsh regions and Scotland) to 100 or more sizeband as the maximum sizeband category, led to a 546 cell grid consisting of 13 sectors x 6 sizebands x 7 regions (England, NI, the 4 Welsh regions and Scotland). Prior to calculating this weight, employees for 30 of the 546 cells in 2024 and 85 of the 1,346 cells in 2022 needed to be reallocated for which there were no complete interviews. The employees for these cells in the IDBR grid were reallocated within the same sizeband by region proportionally across sectors according to their population. The reallocation to other sectors only included sectors where we had at least 1 complete interview. In 2024, this disproportionately affected the 100 or more sizeband where there were a greater proportion of cells in the IDBR database with no complete interviews.

Following this reallocation, for each sector by sizeband by region cell, the employment adjustment weight was calculated by dividing the reallocated IDBR estimate of the population of employees in the cell by the estimated population of employees under the core unit weight. Trimming of this weight was not necessary. A composite core employment weight (EMPWEIGHT) was created by taking the product of the employment adjustment weight and core unit weight.

This core employment weight (EMPWEIGHT) is used as the default when analysing questions in the core questionnaire whose responses are numbers of employees. When applied to estimates of total number of employees provided by establishments in the survey, it naturally sums to the total employment population in the UK. This weight was shown in profiling to reduce bias in the profiles of number of employees by sector, sizeband and region and their two-way interactions down to negligible levels, when comparing with the IDBR employment population.

It should be noted that due to no interviews being achieved in the 100 or more / Financial Services category for Scotland in 2024, it was not possible to weight back to the employment population for this cell. Though Scottish employers in the 100 or more / Financial Services cell only account for 2% of all Financial Services employers in Scotland, they account for 77% of the Financial Services employee population in Scotland, meaning that only 23% of this population could be accounted for by weighting. Volume results for Financial Services employers are therefore not included in Official Statistics publications. Examples of figures not presented for this sector in Scotland include the volume of skill-shortage vacancies experienced by employers and the volume of employees with skills gaps. This in part reflects the difficulties mentioned in the Fieldwork section around engaging large banks in the survey.

Core weights

To summarise, the 2 core weights provided are:

- The core unit weight (UNITWEIGHT): the default for analysing questions in the core questionnaire whose responses are numbers of business establishments. It is defined as the product of the selection weight and non-response weights.
- The core employment weight (EMPWEIGHT): the default for analysing questions in the core questionnaire whose responses are numbers of employees. It is defined as the product of the core unit weight and the employment adjustment weight.

Module Adjustment weight

Module weights were also developed to be used as the default for analysing questions in any 1 of the 4 survey modules A through to D. Respondents across all regions were randomly allocated to 1 of the 4 modules with approximately equal probability.

In 2022, to help minimise interview length, whilst maximising base sizes in the devolved nations, all establishments in Wales, Northern Ireland and Scotland were

allocated to one of the modules (with equal probability between A, B, C and D from within the interview), whereas only approximately two-thirds of English establishments were allocated to modules.

The modules therefore over-represent the devolved nations and need an additional weight to represent them in their correct proportion. A probability of selection for ANY of the modules A to D was calculated separately for England and the devolved nations (with core unit weight active) and then an additional module adjustment weight was calculated as 1 divided by this probability of selection. Profiles showed that the random allocation between modules A, B, C and D produced very consistent profiles by Sector, Sizeband and Region within each module individually and therefore it was not necessary to calculate the probability for each module individually.

In 2022, a composite module unit weight was calculated, just for cases allocated to modules, as the product of the core unit weight and the module adjustment weight. An additional module employment weight was calculated as the product of the module unit weight and the employment adjustment weight from the previous stage. Separate versions of the module unit weight and module employment weight were then calculated for each module A to D which were scaled to their correct population totals.

Profiles showed that when the core weights (UNITWEIGHT and EMPWEIGHT) were applied in 2022 and 2024, the difference in profile of the modules by sector, sizeband and region against the core unit weighted total sample was negligible. However, the differences in module profile against the core employment weighted total sample were large enough not to be considered negligible. Following this comparison, it was decided to additionally RIM weight each of the modules A to D to be equivalent to the core sample profile by both unit and employment. Although the additional Unit rim weighting was not strictly necessary it was felt that we should rim weight both the unit and employment profiles for consistency.

In 2022, no trimming of the additional RIM weights was necessary and final version of the module unit and module employment weights were created for each module. Profiles by these weights precisely matched those of the core sample profile.

In 2024, the RIM targets for each module were region (all 15 including English and Welsh regions), sector (all 13) and sizeband (all 7 sizebands for the module unit weight including 250 or more employees, and 6 sizebands for the module employment weight, taking 100 or more employees as the large band).

Additionally, in 2024, separate capping of these additional RIM weights was

necessary to reduce extreme weights, applied separately for each of Module A to D for each of their module adjusted employment and unit weights. Capping involves establishing a maximum threshold weight to eliminate large outliers (extreme weights going beyond the maximum threshold are changed to have the same weight as the maximum threshold). The final version of these capped module unit and module employment weights were created for each module and rescaled to ensure each module's grossed frequencies summed to the correct employer and employment population total. Profiles by these weights by sector, sizeband and region precisely matched those of the core sample profile for the total sample.

Special Module Combination Adjustment Weight

An additional special set of weights was needed for each of the Underutilisation and Upskilling sections. These questions were asked in both modules A and B in 2024 and B and D in 2022. However, while for Module A (B in 2022) these were asked of all regions, for Module B (D in 2022) they were only asked of respondents in Northern Ireland and Scotland (and Wales in 2022), thereby giving these countries a larger sample size. The special combination weight was calculated for analysing these sections combined across both modules, rescaling to the correct population totals for units and employment. Due to the over-representation of these countries arising from Module B (D in 2022), these regions needed to be scaled down to their correct proportion of total population.

A rescaling of the existing module weights, conditional on nation, was performed and a version of a combined weight for Modules A and B (B and D in 2022) was created for units and employment for application to either the Underutilisation or Upskilling section. Profiles showed that these additional weights represented the countries in the correct proportions

Local geography weights

ESS data is also used to conduct analysis at local geography level. Prior to 2022, ESS used Local Education Authority (LEA) categories for weighting purposes for England sample. In 2024, as in 2022, Upper Tier Local Authority (UTLA) was used to categorise local subregions instead, due to the discontinuation of Local Education Authorities. This comprises 153 subregions, providing a similar level of granularity to the previously used LEA. UTLA analysis weights were created for both employer-based (UTLA_UNITWEIGHT) and employment-based analysis (UTLA_EMPWEIGHT). Collapsing UTLAs also allows analysis by other regional groupings such as Mayoral Strategic Authorities (MSA). In the Official Stats publication, 2022 and 2024 are both coded to the MSA boundaries at the time of

fieldwork (for example, ESS 2022 data is reporting boundaries as they were in 2022). MSA is provided as a variable for analysis in the Official Statistics publication rather than UTLA because of restrictions on analysis by UTLA due to small sizes.

Northern Ireland was grouped into 5 categories using District Council area: Belfast, East, South, North and West. These 5 regions were comprised of the 11 District Council geographies of Northern Ireland: Belfast - comprised of the Belfast district council; East - comprised of the Ards and North Down, Mid and East Antrim, Antrim and Newtownabbey, and Lisburn and Castlereagh district councils; South - comprised of the Armagh City Banbridge and Craigavon, and Newry Mourne and Down district councils; North - comprised of the Causeway Coast and Glens, and Derry City and Strabane district councils; West - comprised of the Mid Ulster, and Fermanagh and Omagh district councils. Scotland was grouped into a combination of Regional Outcome Agreement (ROA) regions and local authorities (the latter was required in some cases due to overlap between some of the ROA regions). This comprised Aberdeen and Aberdeenshire (ROA), Ayrshire (ROA), Borders (ROA), Dumfries and Galloway (ROA), Edinburgh and Lothians (ROA), Fife (ROA), East Dunbartonshire (LA), East Renfrewshire (LA), Glasgow (LA), Highlands and Islands (ROA), North Lanarkshire (LA), South Lanarkshire (LA), Tayside (ROA), Inverclyde (LA), Renfrewshire (LA), West Dunbartonshire (LA), and West Lothian (ROA). Again, these weights covered both employer-based analysis (NI_SCOT_REG_UNITWEIGHT) and employment-based analysis (NI_SCOT_REG_EMPWEIGHT). No further local weighting was required for Wales as the core weights had already split Wales into 4 subregions.

Prior to 2022, RIM weights were imposed within the core weights to ensure the survey population of each local geography matched the employer population without further correction for size and sector at this level. This approach was reviewed in the 2022 survey given the changes in weighting approach mentioned above. Profiles were run of the UTLAs within each English and Welsh region and within Scotland and NI, using the core unit and employment weights. These profiles showed only negligible departures from the expected proportions of interviews in each UTLA (at the most 1 to 2 percentage points, with most close to zero with broad region). Given that the previous weighting stages were design to obtain a balance by sector, sizeband, region and two-way combinations of these variables, it was felt that further RIM weighting would not only be unnecessary but would re-introduce bias in other variable corrected by the previous weights.

As in 2022 separate weights were created for the purposes of analysis at local geography level. This was achieved by scaling to each local geographical group's population via target weighting, using the core unit and employment weights described as input weights. Additionally for ESS 2024, due to the employment

adjustment weight being applied to England as a whole, rather than the 9 English regions; a similar target weighting was used to balance the English regions for employment-level analysis at English region level (ENG_REG_EMPWEIGHT). The core unit weight is still appropriate to use for English region analysis on employer unit measures.

All of the local geography weights described above should only be used to conduct analysis for the corresponding geographies. It is not designed to allow analysis by other variables within these geographies. For example, the English regional employment weight (ENG_REG_EMPWEIGHT) introduced in 2024 is not designed to allow analysis by size or sector within a particular region.

For modular questions, the original modular weights should be used to run regional analysis due to sample restrictions preventing specific regional weighting at this level.

Two-digit SIC weights

As in 2022, target weighting was used to scale to the respective populations of each 2-digit SIC code, using the core unit and employment weights described above as input weights. The final SIC unit and employment weights should only be used for core (i.e., non-modular) questions.

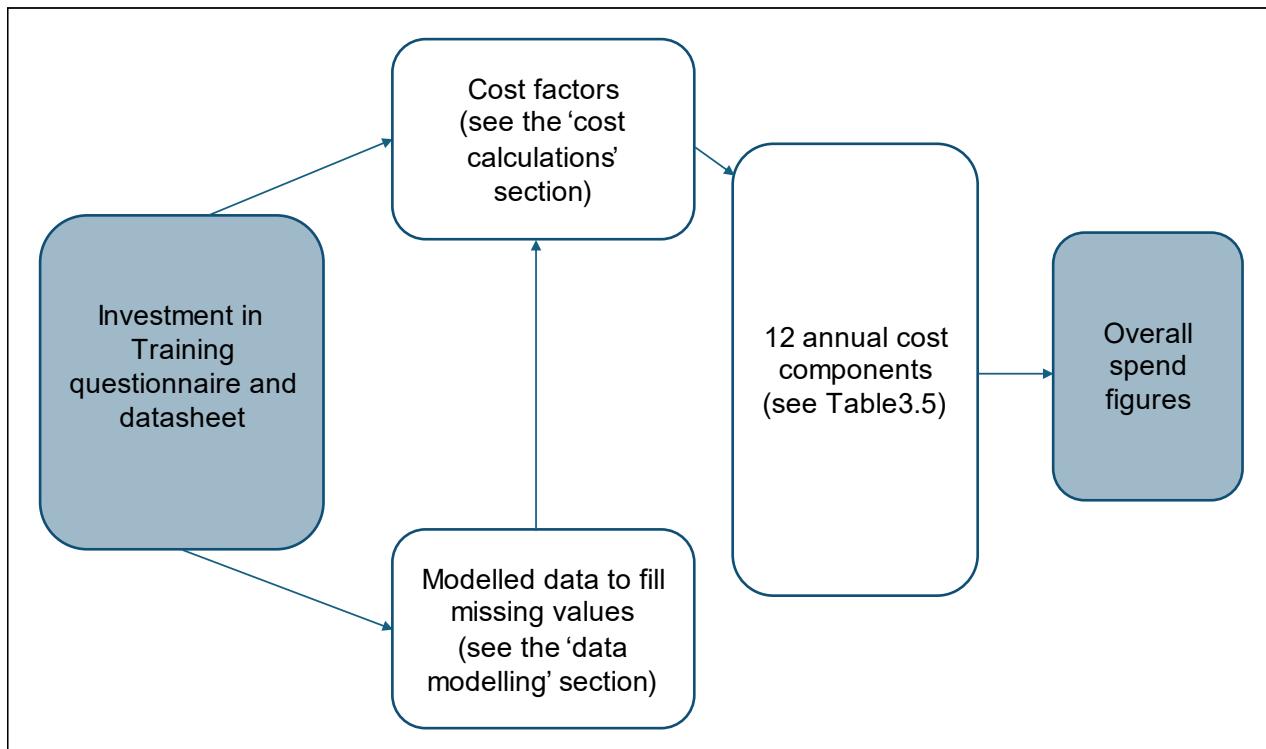
Again, the SIC weights are not designed to allow analysis by subgroup within 2-digit SIC code (e.g. analysis by sizeband). The original modular weights should be used to run regional analysis for modular questions.

[Go to top](#)

3. Investment in Training survey

A separate Investment in Training study was conducted by IFF Research to provide detailed estimates of employer expenditure on training. The approach replicated that of the Investment in Training Surveys in 2019, 2017, 2015, 2013 and 2011, which, in turn, had replicated the previous Cost of Training studies conducted in England and Northern Ireland in 2009. The process required to achieve the final training spend figures involved multiple steps, as demonstrated in Figure 3-1. Once the survey data were collected, modelling was conducted to impute missing data (i.e., where respondents were unable to provide an exact figure for a survey question). Modelled data were combined with data from other sources to create 12 'cost components.' Summed, these generated the overall training expenditure figure.

Figure 3-1 Summary of the Investment in Training data process



Sampling

Sample for the Investment in Training survey comprised employers that a) had completed the core ESS survey, b) had indicated that they had provided training for staff over the last 12 months and c) had indicated that they were happy to be re-contacted in order to provide more specific information about training expenditure (question SI3 of the main stage questionnaire).

Similar to the core ESS 2022 survey, the 2022 Investment in Training survey included employers from Scotland for the first time since 2017.

Data collection method

Employers were sent a datasheet to complete by email, and their responses were collected by telephone. All respondents were called before being sent the datasheet. This involved a short conversation thanking them for taking part in the core ESS interview, reminding them that they indicated that they were happy to take part in a short follow-up survey, introducing the idea of sending the datasheet, encouraging them if necessary to take part and checking their contact details. If, after 5 attempts, we did not manage to get through to the named respondent, an email and datasheet were emailed through automatically (provided an email address was given in Wave 1).

A few days after sending the datasheet (set at 3 working days unless the respondent specified a date when they wanted to be called back or they had already been called at least 6 times), an interviewer called back to try to conduct the full interview.

Questionnaire

Given the need to closely replicate the Investment in Training studies undertaken in the UK in 2011, 2013, 2015, 2017, and 2019 and previously in England in 2005, 2007 and 2009, and also in Northern Ireland in 2008, the datasheet was largely unchanged compared to that used for these previous surveys.

2024

For ESS 2024, as part of the cognitive testing exercise for the core ESS questionnaire (detailed in Chapter 2), questions asking the amount employers paid in levies to training organisations (Q13) and the amount received in grants from training organisations (Q14) were tested to assess comprehension and understanding of the terms 'levies' and 'grants'. The 2022 IiT survey saw a large increase in grants compared with levies (particularly in England), with it being unclear what led to this change, cognitive interviews also aimed to assess whether employers had seen notable changes in the amount received in grants over the last few years. However, none of the employers interviewed had noticed any significant changes in the amounts paid in levies or received in grants over the last few years.

Following the cognitive testing, an additional prompt was added to Q13 to clarify the definition of "levy payments" where necessary. Further small changes were made to the telephone questionnaire and datasheet at Q14 to ensure that the most relevant organisations within England, Northern Ireland and Wales were also cited.

Further cognitive testing was also carried out during the first few days of the Investment in Training fieldwork period. At the end of the survey, 39 respondents were asked a number of follow-up questions to test the following subject areas:

- **Levy payments:** To understand interpretation of 'levy payments' and to explore which organisations employers are thinking about when answering this question, including the exclusion of Apprenticeship Levy payments.
- **Grants and subsidies:** To test the organisations prompted within this question and whether employers have experienced any changes to these in recent years.
- **Fees to external providers:** To check which types of providers are being included and excluded at this question.
- **Payments using Apprenticeship Levy funds:** A new question tested, which

asked employers in England who had made payments using levy funds for the total value of payments made using Apprenticeship Levy funds, through an apprenticeship service account (QC3).

Overall the questions were found to be well understood and no changes were made to the script as a result of this further cognitive testing. The new question QC3 was well understood during cognitive testing and was therefore retained in the main IiT survey for the remainder of the fieldwork period.

2022

For ESS 2022, one change made when compared to 2019 was to reintroduce references to sector skills bodies from Scotland at Q14, which ask about the value of grants or subsidies received from such organisations. Further small changes were made to the telephone questionnaire and datasheet at Q14 to ensure that the most relevant organisations within England, Wales, and Northern Ireland were also cited.

Additionally, in 2022 in order to better capture usage of the apprenticeship levy in England, and to ensure that apprenticeship training was recorded consistently overall, some minor changes were made to the telephone questionnaire:

- A line of text was added prior to the screener questions S8 and S9, stating that respondents should only consider employees on the payroll of their site/location when answering, not of the organisation as a whole. These screener questions then asked respondents if they had anyone on the payroll at the site undertaking an apprenticeship over the last 12 months and, if so, how many (including any who had since left).
- At Q13, when asking about levy payments made to training organisations, it was made explicitly clear to respondents that this figure should not include Apprenticeship Levy payments.

Quotas

2024

For ESS 2024, the aim was to achieve 6,500 complete, useable interviews. Using a quota sampling approach, the target was further broken down into 2,500 interviews among employers in England, 1,000 in Northern Ireland, 1,500 in Wales, and 1,500 in Scotland.

Notional targets were also set using an interlocking grid of size (2 to 4 employees, 5

to 9, 10 to 24, 25 to 49, 50 to 99, 100 or more) by training activity (off-the-job only, on-the-job only and both) within English region, with an additional (non-interlocking) sector target. However, it was known at the outset that the fieldwork approach would essentially be an attempted census of employers from the core survey that trained and agreed to being contacted for the Investment in Training survey given this was a small starting sample, and the priority was to reach the overall target number of interviews.

2022

For ESS 2022, the aim was to achieve 11,425 complete, useable interviews. This required a fieldwork target of around 12,000 as it was expected that some records would ultimately prove to be unsuitable for analysis due to high levels of 'don't know' responses.

Notional targets of 7,500 interviews among employers in England, 1,000 in Northern Ireland, 1,425 in Wales, and 1,500 in Scotland were set. However, it was known at the outset that the fieldwork approach would essentially be an attempted census of employers in each of the countries outside of England given that sample was limited to employers from the core survey that trained and agreed to being contacted for the Investment in Training survey. Any shortfall of interviews among the countries outside of England was to be made up for by additional interviews among employers in England.

Within England a target was set using an interlocking grid of size (2-4 employees, 5-9, 10-24, 25-49, 50-99, 100+) by training activity (off-the-job only, on-the-job only and both) within English region, with an additional (non-interlocking) sector target. Due to an attempted census approach being taken in Northern Ireland, Wales and Scotland, no quotas on size, sector or training type were set.

Achieved interviews and response rate calculations

2024

In total, information on training expenditure was collected from 6,210 sites, although 275 of these were not included in the final dataset because of incompleteness (i.e., a large number of 'don't know' responses); hence analysis is based on data from 5,935 sites.

Fieldwork was undertaken by IFF Research from 17th July 2024 to 21st February 2025.

The overall response rate for the survey was 80% (similar to the 82% response rate seen in 2022) calculated as “achieved interviews” as a proportion of all “complete contacts”. The response rate calculated as “achieved interviews” as a proportion of total sample was 57% (an increase from 37% in 2022). Response rates were higher than the core survey as respondents were already engaged in the research and had agreed to a follow up survey. A detailed breakdown of survey outcomes is shown in Table 3-1 and the response rate by nation in Table 3-2.

Table 3-1 Sample outcomes and response rate in 2024

Outcome	Number of contacts	% of all sample	% of complete contacts
Total sample	10,805	100%	
‘Live’ / Out of quota i.e., records for which a final outcome (refusal, completed interview etc.) was not reached.	3,068	28%	
Unobtainable / invalid numbers	101	1%	
Total complete contacts	7,719	71%	100%
Achieved interviews	6,210	57%	80%
Respondent refusal	1,496	8%	19%
Quits during interview	13	<1%	<1%

Table 3-2 Response rate by nation in 2024

Outcome	England	Northern Ireland	Wales	Scotland
Interviews	2,247		931	1,571
Response rate	76%		82%	84%

2022

In total, information on training expenditure was collected from 12,353 establishments, although 521 of these were not included in the final dataset because of incompleteness (i.e., a large number of ‘don’t know’ responses); hence analysis is based on data from 11,832 establishments.

Fieldwork was undertaken by IFF Research from 15th August 2022 to 25th April 2023.

The overall response rate for the survey was 82% (up from 68% in 2019) calculated as “achieved interviews” as a proportion of all “complete contacts”. Response rates were higher than the core survey as respondents were already engaged in the research and had agreed to a follow up survey. A detailed breakdown of survey outcomes is shown in Table 3-3 and the response rate by nation in Table 3-4.

Table 3-3 Sample outcomes and response rate in 2022

Outcome	Number of contacts	% of all sample	% of complete contacts
Total sample	33,037	100%	
‘Live’ / Out of quota i.e., records for which a final outcome (refusal, completed interview etc.) was not reached.	17,626	53%	
Unobtainable / invalid numbers	350	1%	
Total complete contacts	15,061	46%	100%
Achieved interviews	12,353	37%	82%
Respondent refusal	2,692	8%	18%
Quits during interview	16	<1%	<1%

Table 3-4 Response rate by nation in 2022

Outcome	England	Northern Ireland	Scotland	Wales
Interviews	8,164	1,084	1,594	1,511
Response rate	82%	84%	81%	81%

Data modelling

In order to calculate overall training expenditure, each record in the dataset needed to have a response to each question (even if it is a zero in relation to types of training the sites does not supply). As expected, not every respondent was able to supply every piece of information requested. In order to 'fill in' the missing data, averages were applied for those questions based on those respondents who were able to answer that question.

Matching the approach taken in the Cost of Training Survey in England in 2009 and for the UK Employer Skills Surveys in 2011, 2013, 2015, 2017, and 2019, when a respondent could not provide an exact (integer) answer the survey was set up to prompt respondents to give a range answer ('between £500 and £999' and so forth). Although this range answer still needs transferring into an exact figure within the range, it improves the accuracy and reliability of the modelling process since the modelling for these range responses is based on those respondents who gave an exact answer which fell into that range rather than simply being an average of all responses.

For questions unrelated to salaries, a modelling process was used to calculate mean responses from those giving an exact answer (excluding zero). Where a respondent gave a range answer, they were assigned a corresponding mean for their site size for the range response selected. Where they were unable to give either an exact or a range answer, they were assigned the overall mean for the question within their size band.

For salaries, a slightly different approach was taken to modelling 'don't know' answers, again based on that used in the Investment in Training Survey 2011 - 2019, and in the previous Cost of Training Surveys in England (2005, 2007 and 2009) and Northern Ireland (2008). Initially, as above, range and overall means were calculated. Rather than size of site, location of site (London or non-London) was seen to be the major determinant of salary levels, so means were split on this basis rather than by the size bands as used for the modelling of other 'don't know' answers. Where a range had been given, the appropriate mean was used as the imputed value.

For those respondents unable to give even a salary range, a method was used to determine whether they pay salaries above or below the average, and to what degree. This took into account the site's location and evidence from other salary questions on the datasheet. Where exact answers had been given for other salary questions, a ratio was calculated between their actual answer and the London/non-London mean (as appropriate) for that question. This gave a ratio that expressed the degree to which that employer over-paid or under-paid employees in the roles discussed, compared with the mean. Where salary answers were missing (and no range information was provided) the assigned value would be calculated as the London or non-London mean multiplied by the ratio of a related question for that site. The ratio selected was different for each question and dependent on which questions were judged to be the most closely related. This enabled the estimate to be either up-weighted or down-weighted in keeping with their pay for other roles.

The simulation procedure and the precise order of selection used for salary questions is shown in Table 3-5, along with the proportion modelled using range information and the proportion modelled that did not provide range information.

Table 3-5 Treatment of missing values

Question	Value given to missing data	Base (2022)	Base (2024)	Percentage modelled within range (2022)	Percentage modelled within range (2024)
Q1 - Number of employees that participated in an education or training course, provided either externally or internally over the past 12 months	Mean within 6 employment size bands (within recorded range where available)	6,438	3,760	1%	3%
Q2 - Number of days on	Mean within 6 employment	6,124	3,624	5%	7%

average each participant spent on an education or training course over the past 12 months

Q3 - Average basic annual salary of participants on education or training courses over past 12 months	Mean calculated within London/non-London sites within recorded ranges where available. Where range information not provided:	6,124	3,624	24%	26%
	<ol style="list-style-type: none">1. if Q17 answered (and an exact answer given), calculate proportion above or below the Q17 average for the site and up-lift or reduce the appropriate Q3 mean (London or non-				

London) by
this
proportion
to generate
Q3 figure
for this site

2. if Q17 not
answered
with an
exact value
apply
procedure
at 1. to
Q21
3. if Q21 not
answered
with an
exact
value,
apply
procedure
at 1. to
Q24
4. if Q24 not
answered
with an
exact value
apply
procedure
at 1. to
Q10
5. if Q10 not
answered
with an
exact value
use
appropriate
Q3 mean
(London or
non-

London)
unadjusted

Q4 - Cost of fees to external providers of training courses for your employees over the past twelve months	Mean within 6 employment size bands (within recorded range where available)	6,124	3,624	15%	19%
Q6A - Total basic annual salaries of any full time or part time training centre staff	Mean within 6 employment size bands (within recorded range where available)	295	231	24%	25%
Q6B - Other training centre running costs over the last 12 months	Mean within 6 employment size bands (within recorded range where available)	295	231	17%	15%
Q7A - Amount spent on using any off-site training centres located elsewhere within your organisation over the past twelve months	Mean within 6 employment size bands (within recorded range where available)	1,683	1,155	17%	28%

Q8 - Number of people at site directly involved in providing, administering or making policy decisions about training, excluding any training centre staff	Mean within 6 employment size bands (within recorded range where available)	6,124	3,624	Fewer than 1%	Fewer than 1%
Q9 - Percentage of time staff involved in providing, administering or making policy decisions about training	Mean within 6 employment size bands (range information not recorded for this question)	5,497	3,206	N/A	N/A
Q10 - Average basic annual salary of staff involved in providing, administering or making policy decisions about training	Same procedure as Q3 but different order of selection: Q24, Q3, Q17, Q21	5,497	3,206	23%	22%

Q11 - Cost of equipment and materials used for training employees over the past twelve months, excluding training centre costs	Mean within 6 employment size bands (within recorded range where available)	6,124	3,624	8%	11%
Q12 - Travel and subsistence payments and travelling time payments made to participants and trainers who spent time on courses over the past twelve months	Mean within 6 employment size bands (within recorded range where available)	6,124	3,624	9%	10%
Q13 - Levy payments	Mean within 6 employment size bands (within recorded range where available)	6,124	3,624	4%	5%
Q14 - Grants or subsidies	Mean within 6 employment size bands (within recorded range where available)	6,124	3,624	4%	4%

Q15 - Number of employees that participated in other off-the-job training	Mean within 6 employment size bands (within recorded range where available)	6,438	3,760	1%	1%
Q16 - Number of days on average each employee participating in other off-the-job training spent away from their usual work position	Mean within 6 employment size bands (within recorded range where available)	4,722	2,603	6%	5%
Q17 - Average basic annual salary of employees who have taken part in other off-the-job training	Same procedure as Q3 but different order of selection: Q3, Q21, Q24, Q10	4,722	2,603	22%	23%
Q18 - Cost of fees to external providers of providing other off-the-job training	Mean within 6 employment size bands (within recorded range where available)	4,722	2,603	11%	12%
QC3 – Value of payment made using Apprenticeship	Mean within 6 employment size bands (within	N/A	188	N/A	19%

Levy funds over the last 12 months	recorded range where available)					
Q19 - How many employees do you estimate receive on-the-job and informal training and development during a typical month?	Mean within 6 employment size bands (within recorded range where available)	10,136	5,155	2%	3%	
Q20 - How many working hours on average each of these employees spends on on-the-job and informal training and development during a typical month?	Mean within 6 employment size bands (within recorded range where available)	9,164	4,668	8%	3%	
Q21 - Average basic annual salary of employees who receive on-the-job training and development in a typical month?	Same procedure as Q3 but different order of selection: Q3, Q17, Q24, Q10	9,164	4,688	27%	29%	

Q22 - Number of employees who GIVE on-the-job training during a typical month	Mean within 6 employment size bands (within recorded range where available)	9,164	4,688	1%	2%
Q23 - Number of working hours on average each employee spends giving on-the-job training during a typical month	Mean within 6 employment size bands (within recorded range where available)	8,197	4,182	8%	11%
Q24 - Average basic annual salary of your employees who give on-the-job training in a typical month	Same procedure as Q3 but different order of selection: Q10, Q3, Q17, Q21	8,197	4,182	25%	27%
Q25 - Amount spent on online training or e-learning for staff at this site in the past 12 months	Mean within 6 employment size bands (within recorded range where available)	8,477	4,546	14%	18%

“Base” = Total number of respondents eligible to respond to each question

“% modelled within range” = percentage of base that had given a range value for the

question

“% modelled without range” = percentage of base that had not been able to provide even a range estimate for the question

Cost calculations

To help respondents, some costs were collected in monthly rather than yearly terms, and others per trainee rather than across all trainees. Following data modelling however – which ensured all respondents had at least an estimated exact answer for all questions – individual questions were combined to calculate 12 total annual cost components. Some required adjustments to be made to the collected survey data to ensure they presented true costs of training. For example, the survey collected salary costs of individuals providing training and those trained, but for simplicity did not collect total labour costs such as National Insurance and pension contributions. The adjustments, and the specific adjustment factors used, are detailed in Table 3-6.

Table 3-6 Factors included in cost calculations

Factor	Value	Explanation
Labour cost up-weight	21.35% (2022)	It was found during the pilot stage of LTW 2000 that employers were far better placed to report the salaries of their employees than the total cost of employing them. Respondents were, therefore, asked for the average basic salaries of those receiving and providing training. An up-weight of 21.35% in 2022 and 21.46% in 2024 was then applied to these answers to take account of National Insurance, employer pension contributions, overtime and other additional elements.
	21.46% (2024)	The source of the 21.35% and 21.46% figures was the ONS Wages and Salaries and Employers' Social Contributions figures, for Q4 2021 to Q3 2022 in ESS 2022 and for Q3 2023 to Q2 2024 in ESS 2024. This report treats these figures as direct remuneration. In the UK, direct remuneration made up 82.41% of total labour costs in 2022 and 82.33% of total labour costs in 2024. Hence an uplift of 100/82.41 (i.e. 1.2135 or 21.35%) in 2022 and 100/82.33 (i.e. 1.2146 or 21.46%) in 2024 is

required to convert direct remuneration to total labour costs.

The source of this figure for the 2011-2019 Investment in Training surveys was the ONS Index of Labour Costs per Hour (ILCH) – the proportion that the components of labour costs contribute to total labour costs, by sector, UK. This was discontinued in 2020.

As the ILCH has been discontinued, the labour cost-up weight for 2022 and 2024 has been calculated using 2 Office for National Statistics figures:

- Wages and Salaries (D11)
- Employers' Social Contributions (D12)

To do so, for each year of the survey the total wages and salaries (D11) and employers' social contributions (D12) have been calculated from Q4 of the previous year to Q3 of the year of the survey. The proportion of wages and salaries of the total labour costs have then been calculated. This percentage has then been calculated into an uplift with the following formula (100/wages as percentage of total labour costs) Where Investment in Training figures for previous years are presented in the 2024 report, they may differ from those presented in reports prior to 2022 due to this change and updating of previous years' data.

Historic labour cost up-weight figures are now as follows:

- 2011 – 21.23%
- 2013 – 21.66%
- 2015 – 19.63%
- 2017 – 20.56%
- 2019 – 20.65%

The figures from 2011 – 2019 were based on ONS Wages and Salaries and Employers' Social Contributions figures for Q3 to Q2 of the relevant years. In line with this the 2024 figures use Q3 2023 to Q2

2024. The 2022 figure is based on Q4 2021 to Q3 2022 as fieldwork for the last wave of the survey began later in the year than usual.

Days worked per year	224.5582 (2024) 224.01 (2022)	Used to calculate the per-working-day salary of an employee in order to calculate the cost, for example, of training an employee for 1 working day per year on the basis of their annual salary. Working age employees in England (from Labour Force Survey Quarter 4 (Oct to Dec) 2021 for ESS 2022 and 2023 for ESS 2024): Full-time workers worked an average of 5.0139 days per week, 5.0143 in 2022. Received an average of 27.1646 paid days holiday, plus 9 bank / public holidays in 2024, and 26.7294 paid days holiday in 2022 with 10 bank / public holidays. This gives: $52 \times 5.0139 (=260.7228)$ possible working days a year in 2024, $52 \times 5.0143 (=260.7436)$ in 2022, less 27.1646 days annual leave and 9 days bank/public holiday = 224.5582 days worked per year in 2024, 26.7294 days annual leave and 10 days bank / public holidays = 224.0142 days worked per year in 2022.
Hours worked a day	7.76 (2024) 7.7857 (2022)	Used to convert number of working hours of training to working days. Derived from the basic usual hours of full-time workers (mean of 38.9 per week in 2024 and 39.04 in 2022) divided by a mean of 5.0139 days worked a week in 2024, 5.0143 in 2022 by full-time workers = 7.76 in 2024 and 7.7857 in 2022.
Working months in a year	11	Source: Labour Force Survey Quarter 4 (Oct to Dec) 2021 for ESS 2022 and 2023 for ESS 2024.
		Used to convert monthly training figures given in the on-the-job section of the datasheet into annual figures, assuming that trainees are available for on-the-job training for 11 months a year.

The formulae used to convert raw data to the comparable annual cost components are listed in Table 3-7. All calculations were performed using modelled data.

Table 3-7 Formulae for the annual cost components in 2024

Annual cost component	Formula
A Trainee labour costs (Q1–3)	$Q1 * Q2 * 121.46\% * Q3 / 224.5582$
B Fees to external providers (Q4)	Q4
C On-site training centre (Q6a/b)	$(121.46\% * Q6a) + Q6b$
D Off-site training centre (in the same company) (Q7a)	Q7
E Training management (Q8–Q10)	$Q8 * (Q9/100) * 121.46\% * Q10$
F Non-training centre equipment and materials (Q11)	Q11
G Travel and subsistence (Q12)	Q12
H Levies minus grants (Q13–Q14)	Q13-Q14
Sub-total (course related)	A + B + C + D + E + F + G + H
I Labour costs (Q15–Q17)	$Q15 * Q16 * 121.46\% * Q17 / 224.5582$
J Fees to external providers (Q18)	Q18
Sub-total (other off-the-job training)	I + J
OFF-THE-JOB TOTAL	A + B + C + D + E + F + G + H + I + J
K Trainee's labour costs (Q19–Q21)	$Q19 * Q20 * 121.46\% * Q21 * 11 / (224.5582 * 7.76)$

L Trainers' labour costs (Q22–Q24)	$Q22 * Q23 * 121.46\% * Q24 * 11 / (224.5582 * 7.76)$
ON-THE-JOB TOTAL	K + L
TOTAL TRAINING SPEND	A + B + C + D + E + F + G + H + I + J + K + L

Where derived employment-based training spend figures are shown in this report (expenditure per trainee, or per capita, for example) and there is a choice between taking the measure given in the main ESS data and that in the data for the Investment in Training survey, the data from the main survey are used. This is because base sizes are larger in the main survey and a separate employment weight is available to ensure a closer match to the actual workforce profile. Overall spend per trainee, therefore, is calculated as the total training spend from the Investment in Training survey, divided by the weighted average number of trainees in businesses that train from the main survey. The same approach is used for spend per employee, dividing total spend from the Investment in Training survey by the weighted average number of employees in businesses that train from the main survey.

Weighting

In order to weight the Investment in Training study, population figures were calculated using the core ESS survey data (which had in turn been weighted using the IDBR figures used for the main survey analysis). Data were weighted on the basis of interlocking grids on 7 employment size bands (2 to 4, 5 to 9, 10 to 24, 25 to 49, 50 to 99, 100 to 249, 250 or more) by 13 grouped industry sectors, and by the type of training they carried out (on-the-job only, off-the-job only, or both).

A regional RIM weight was then applied using targets based on the proportion training in the English regions, Northern Ireland, Wales, and Scotland. In addition, an adjustment was applied to each weight to ensure that the profile of size band within nation was correct. This was in order to ensure site size was accurately represented at a national level as well as a combined England/Northern Ireland/Wales/Scotland level, increasing the accuracy of the spend figure within nations.

Only site-based weights were created for the Investment in Training survey, as all data in the survey are site orientated.

4. Using the survey for analysis

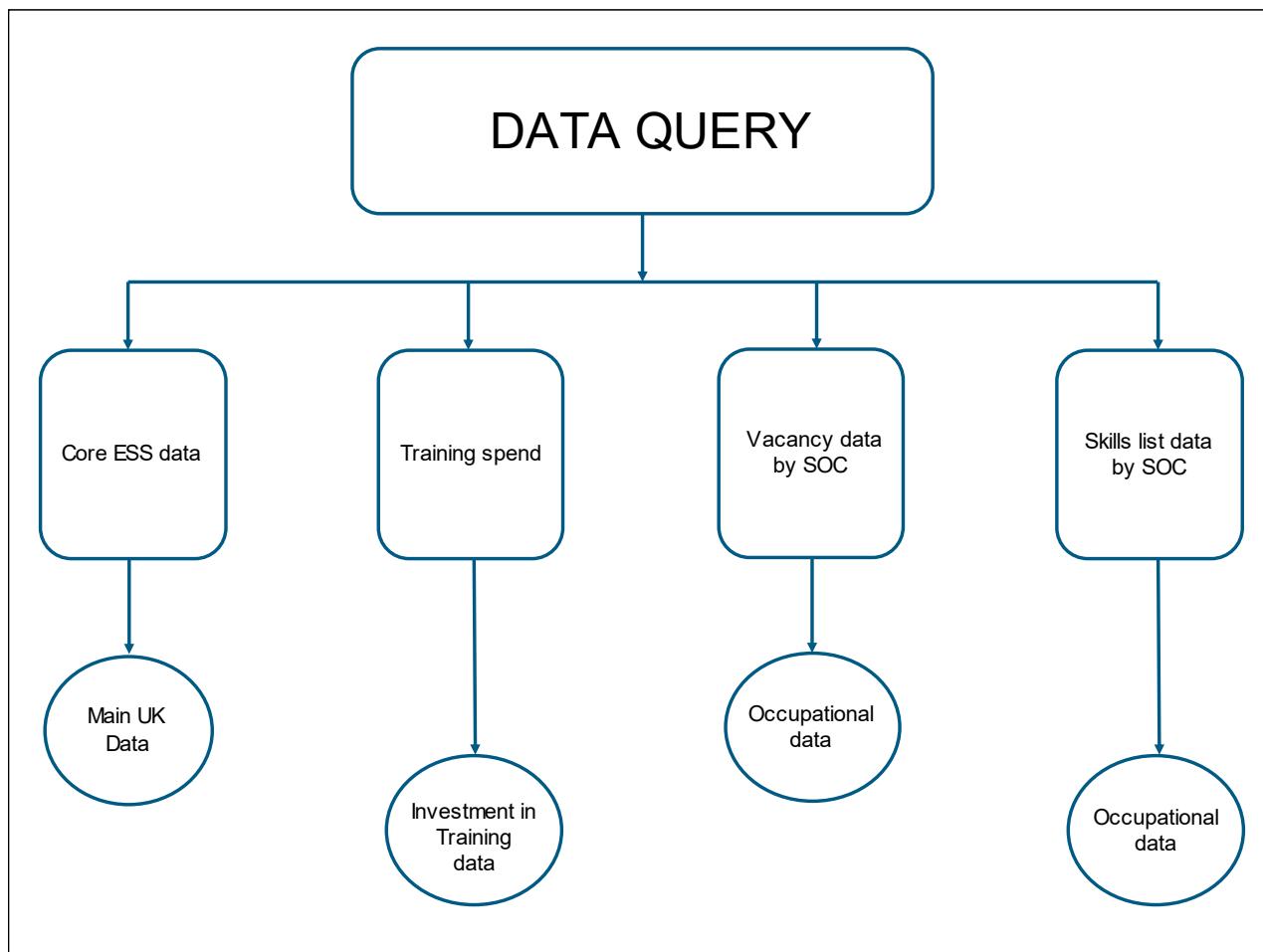
The Employer Skills Survey is designed to be flexible enough to allow analysis of data for a large number of different purposes and split by a large number of different subgroups of data. The survey serves multiple audiences and purposes, and as such a wide range of outputs are available to inform and assist analysis.

- The Official Statistics report (published on the DfE GOV.UK website) presenting key measures – skills shortages, skills gaps, and training.
- The full UK report (which will be published on the DfE GOV.UK website) provides an overview of the survey findings, focusing on nation comparisons and where relevant/interesting other variables, primarily size and sector, as well as change over time and policy-specific questions (e.g., Technical education in England).
- Separate reports for Northern Ireland, Wales and Scotland which include more detailed regional and sectoral analysis in these nations. For Wales, separate regional reports are also produced.
- The accompanying UK Excel tables show the survey data question by question, plus some summary tables, crossed by a number of key analysis and survey variables. These will also be made available on the DfE GOV.UK website, alongside publication of the full UK report.

There are 3 SPSS datafiles that supplement this analysis, each looking at a different population or subject matter. One of the challenges in providing accurate data for a number of different populations and analyses groupings is that each different purpose will have its own population and its own optimum weighting strategy. As a result, there are multiple data files associated with the analysis of the survey.

Figure 4-1 provides a flow chart to identify which dataset to use for any given analysis query.

Figure 4-1 Selecting a datafile



The data will be stored in the ONS Secure Research Service and with the UK Data Service.

Table 4-1 gives details of each of these weights and when each has been and should be used. The unit site weights gross to the full site population and are to be used when running site-based figures (e.g., X% of sites have vacancies). Employment weights gross to the full employment population and are to be used when running volumetric employment-based figures (e.g., total number of vacancies, or skill-shortage vacancies and proportion of all vacancies etc.).

Table 4-1 Application of weights during analysis

Weight name	Year	Coverage	Site / employment	Data use
UNITWEIGHT	2022 and 2024	UK	Site	Main UK data
EMPWEIGHT	2022	UK	Employment	Main UK

and
2024

data

MODUNITWEIGHT	2022 and 2024	UK	Site	Main UK data
---------------	---------------------	----	------	-----------------

MODEMPWEIGHT	2022 and 2024	UK	Employment	Main UK data
--------------	---------------------	----	------------	-----------------

MODBDUNITWEIGHT1	2022	UK	Site	Main UK data
------------------	------	----	------	-----------------

MODBDEMPWEIGHT1	2022	UK	Employment	Main UK data
-----------------	------	----	------------	-----------------

MODBDUNITWEIGHT2 2022 UK Site Main UK
data

MODBDEMPWEIGHT2 2022 UK Employment Main UK
data

MODABUNITWEIGHT

2024 UK

Site

Main UK
data

MODABEMPWEIGHT

2024 UK

Employment

Main UK
data

LOCAL_UNITWEIGHT 2022 England Site Main UK data

LOCAL_EMPWEIGHT 2022 England Employment Main UK data

UTLA_UNITWEIGHT 2024 England Site Main UK data

UTLA_EMPWEIGHT	2024	England	Employment	Main UK data
----------------	------	---------	------------	--------------

NI_SCOT_REG_UNITWEIGHT	2022 and 2024	Northern Ireland and Scotland	Site	Main UK data
------------------------	---------------------	--	------	-----------------

NI_SCOT_REG_EMPWEIGHT	2022 and 2024	Northern Ireland and	Employment	Main UK data
-----------------------	---------------------	----------------------------	------------	-----------------

Scotland

ENG_REG_EMPWEIGHT	2024	England	Employment	Main UK data
SIC2_UNIT_WEIGHT	2022 and 2024	UK	Site	Main UK data
SIC2_EMP_WEIGHT	2022 and 2024	UK	Employment	Main UK data

EMPVOLWEIGHT	2022 and 2024	UK	Employment	Occupa data
VACVOLWEIGHT	2022 and 2024	UK	Employment	Occupa data
HTFVOLWEIGHT	2022 and 2024	UK	Employment	Occupa data
SSVVOLWEIGHT	2022 and 2024	UK	Employment	Occupa data
WEIGHT	2022 and 2024	Investment in Training data	Site	Investm in Traini data

Further information on analysis specific datasets and data variables can be found in the data dictionaries that accompany each SPSS data file.

Modelled data

Number of employees trained and training days variables were calculated using modelled data. Where a “don’t know” answer was given at SF8 (F8 in 2022) or SF11 (F11 in 2022) the modelled variable assigned the site with the mean score for their size and sector. For the number of employees measure, the approach varies slightly in certain cases where sites reported a ‘don’t know’ response, due to low base sizes in that size x sector cell. In these cases, the average proportion of staff trained by those in adjacent size x sector cells reporting an exact number is taken and applied to the overall number of staff in these cases to derive a modelled figure. This ensured that the proportion of staff and total number of days training was not undercounted. Further information on analysing specific datasets and data variables can be found in the data dictionaries that accompany each SPSS data file.

Occupational data

In the occupational data each row represents 1 occupation for which a site had at least 1 vacancy, at the time of the survey. There are cases in which 2 or more occupations for a specific site have been coded to the same SOC code. When calculating the base sizes for each SOC code, this was taken into account. The base sizes should then be intended as the number of occupations for which sites had at least 1 vacancy in the specific SOC code.

[Go to top](#)

Annexes

Annex A: Industry Coding

Each site was allocated to 1 of 13 sectors, based on their Standard Industrial Classification (SIC). SIC 2007 was used to classify sites using the following method. Using the four-digit Standard Industrial Classification (SIC) supplied for each record from either the Market Location or IDBR database, a description of business activity

was read out to each respondent. If they agreed that this description matched the main activity undertaken at the site, then the SIC on Market Location's or the IDBR's database was assumed to be correct. If, however, the respondent felt the description did not correspond to their main business activity at the site (20% of cases), a verbatim response was collected of their main activity. At the analysis stage this was coded to a four-digit SIC which was then used as the basis for their classification into 1 of the 13 sectors.

Table A-1 shows the 13 sectors and their corresponding [SIC 2007 definitions \(opens in new tab\)](#).

Table A-1 SIC 2007 definitions of industry sectors

Sector	SIC 2007
Primary Sector and Utilities	<p>A - Agriculture, forestry and fishing (01-03) Including farming, hunting and other related service activities, forestry and logging, fishing and aquaculture</p> <p>B - Mining and quarrying (05-09) Including mining of coal, metals, sand/stone/clay, and extraction of crude petroleum and natural gas</p> <p>D - Electricity, gas, steam and air conditioning supply (35) Including electric power generation, transmission and distribution, manufacture of gas and distribution of gaseous fuels, steam and air conditioning supply, water collection, treatment and supply, sewerage and waste collection</p>
Manufacturing	<p>C - Manufacturing (10-33) Including manufacture of food and beverage, textiles, chemicals and chemical products, basic pharmaceutical products, other mineral products, manufacture of metals and metal products, machinery, computer and electronic products and equipment, motor vehicles and other transport equipment, furniture, and repair and installation of machinery</p>

and equipment

Construction	F - Construction (41-43) Including the construction of buildings, civil engineering (constructing roads, railways and other utility projects), demolition, and specialised activities such as electrical installation, roofing and scaffold erection
Wholesale and Retail	G - Wholesale and retail trade; repair of motor vehicles and motor cycles (45-47) Including sale, maintenance and repair of motor vehicles, parts and accessories, non-vehicle wholesale (for example agriculture, food, household goods), and the retail trade of all products whether in stores, stalls, markets, mail order or online
Hotels and Restaurants	I - Accommodation and food service activities (55-56) Including hotels, campsites, youth hostels, holiday centres, villages and other short stay accommodation, restaurants and takeaways, event catering and licensed clubs, pubs and bars
Transport and Storage	H - Transport and storage (49-53) Including land, water and air transport (passenger and freight), warehousing and support activities for transportation, postal and courier activities
Information and Communications	J - Information and communication (58-63) Including publishing (books, journals, newspapers etc. and software/computer games), television, film and music production, broadcasting, telecommunications, computer programming and consultancy, information service activities (e.g. data processing and hosting)
Financial Services	K - Financial and insurance activities (64-66) Including banks and building societies, activities of holding companies, trusts, funds and similar financial entities, credit

granting, pensions, insurance and reinsurance

Business services	<p>L - Real estate activities (68)</p> <p>M - Professional, scientific and technical activities (69-75)</p> <p>N - Administrative and support service activities (77-82)</p> <p>Including the buying, selling and renting of real estate, legal activities, accounting, bookkeeping and auditing, management consultancy, architectural and engineering activities, scientific research and development, advertising and market research, specialist design, photographic activities, translation and interpretation, veterinary activities, renting and leasing of tangible goods (motors, household, machinery), employment agencies, travel agencies and tour operations, security and investigation activities, office administration and business support</p>
Public Administration	<p>O - Public administration and defence; compulsory social security (84)</p> <p>Including administration of the State and economic and social policy of the community, provision of services to the community such as defence activities, foreign affairs, justice and judicial activities, fire service and compulsory social security activities</p>
Education	<p>P - Education (85)</p> <p>Including pre-primary, primary, secondary and higher education, other education (such as sports, driving schools, cultural education), educational support activities</p>
Health and Social Work	<p>Q - Human health and social work activities (86-88)</p> <p>Including Hospitals, medical and dental practices, residential care, social work activities</p>
Arts, entertainment, recreation and other service	<p>R - Arts, entertainment and recreation (90-93)</p> <p>S - Other service activities (94-96)</p>

activities	Including performing arts, libraries and museums, gambling and betting, sports facilities, amusement and recreation activities, activities of membership organisations (religious, political, trade union, professional), personal services (hairdressing, beauty, textile cleaning, well-being activities, funeral activities)
NOT COVERED IN SURVEY	<p>T - Activities of households as employers; undifferentiated goods and services producing activities of households for own use (97-98)</p> <p>U - Activities of extraterritorial organisations and bodies (99)</p> <p>Including households as employers of domestic personnel, private households producing goods for own use</p>

[Go to top](#)

Annex B: Targets, sample used and achieved interviews

The tables below show for each region / nation the ratio of sample utilised in fieldwork for each key group, and the achievement of interviews against the original target. Note that “sample used” figures are based on the sample information about size and sector, whereas the “interviews achieved” figures are based on the size and sector of the site as indicated by the respondent.

Table B-1 Targets, sample used and interviews achieved by size and sector: Total (2024)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2 to 4	6,175	33,882	5:1	6,097	99%
5 to 9	5,273	22,119	4:1	5,282	100%
10 to 24	5,044	21,012	4:1	5,647	112%
25 to 49	2,984	12,576	4:1	3,054	102%

50 to 99	1,381	7,882	6:1	1,602	116%
100 to 249	1,383	8,416	6:1	844	61%
250 or more	405	3,063	8:1	186	46%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	1,354	6,397	5:1	1,131	84%
Manufacturing	1,375	5,879	4:1	1,487	108%
Construction	1,829	11,745	6:1	1,711	94%
Wholesale and Retail	4,292	17,581	4:1	4,440	103%
Hotels and Restaurants	2,547	13,734	5:1	2,333	92%
Transport and Storage	836	4,793	6:1	784	94%
Information and Communications	674	4,777	7:1	634	94%
Financial Services	391	2,935	8:1	393	101%
Business services	3,942	18,832	5:1	3,904	99%
Public Administration	474	1,582	3:1	251	53%
Education	1,283	5,703	4:1	1,758	137%
Health and Social Work	2,162	7,943	4:1	2,417	112%
Arts and other service activities	1,486	7,049	5:1	1,469	99%

Table B-2 Targets, sample used and interviews achieved by size and sector: East Midlands (England) (2024)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2 to 4	188	1098	6:1	200	106%
5 to 9	161	741	5:1	173	107%
10 to 24	156	635	4:1	202	129%
25 to 49	96	416	4:1	118	123%
50 to 99	44	257	6:1	69	157%
100 to 249	45	379	8:1	24	53%
250 or more	10	97	10:1	8	80%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	30	196	7:1	45	150%
Manufacturing	59	302	5:1	72	122%
Construction	58	403	7:1	66	114%
Wholesale and Retail	141	598	4:1	147	104%
Hotels and Restaurants	72	452	6:1	86	119%
Transport and Storage	33	203	6:1	33	100%

Information and Communications	18	132	7:1	28	156%
Financial Services	9	49	5:1	7	78%
Business services	122	630	5:1	137	112%
Public Administration	11	46	4:1	8	73%
Education	38	150	4:1	55	145%
Health and Social Work	65	236	4:1	67	103%
Arts and other service activities	44	226	5:1	43	98%

Table B-3 Targets, sample used and interviews achieved by size and sector: East of England (England) (2024)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2 to 4	268	1451	5:1	260	97%
5 to 9	220	886	4:1	235	107%
10 to 24	209	814	4:1	234	112%
25 to 49	121	491	4:1	116	96%
50 to 99	55	285	5:1	87	158%
100 to 249	55	449	8:1	46	84%
250 or more	11	81	7:1	10	91%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall

					target
Primary Sector and Utilities	38	228	6:1	47	124%
Manufacturing	57	235	4:1	72	126%
Construction	93	557	6:1	85	91%
Wholesale and Retail	179	671	4:1	181	101%
Hotels and Restaurants	93	543	6:1	87	94%
Transport and Storage	39	202	5:1	37	95%
Information and Communications	34	238	7:1	30	88%
Financial Services	16	110	7:1	22	138%
Business services	191	904	5:1	194	102%
Public Administration	11	35	3:1	7	64%
Education	50	167	3:1	72	144%
Health and Social Work	80	303	4:1	89	111%
Arts and other service activities	58	264	5:1	65	112%

Table B-4 Targets, sample used and interviews achieved by size and sector:
London (England) (2024)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall
------	----------------	-------------	-------	---------------------	--------------

					target
2 to 4	457	3,235	7:1	505	111%
5 to 9	366	1,991	5:1	350	96%
10 to 24	348	1,836	5:1	347	100%
25 to 49	189	1,173	6:1	163	86%
50 to 99	97	964	10:1	119	123%
100 to 249	100	1,491	15:1	74	74%
250 or more	35	695	20:1	19	54%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	12	99	8:1	17	142%
Manufacturing	42	205	5:1	31	74%
Construction	106	870	8:1	119	112%
Wholesale and Retail	256	1549	6:1	263	103%
Hotels and Restaurants	181	1376	8:1	173	96%
Transport and Storage	43	446	10:1	43	100%
Information and Communications	124	1354	11:1	123	99%
Financial Services	55	779	14:1	49	89%
Business services	458	3036	7:1	433	95%
Public	16	72	5:1	4	25%

Administration

Education	73	312	4:1	96	132%
Health and Social Work	115	566	5:1	112	97%
Arts and other service activities	111	721	6:1	114	103%

Table B-5 Targets, sample used and interviews achieved by size and sector: North East (England) (2024)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2 to 4	79	441	6:1	67	85%
5 to 9	78	372	5:1	71	91%
10 to 24	79	346	4:1	106	134%
25 to 49	47	200	4:1	51	109%
50 to 99	21	136	6:1	24	114%
100 to 249	23	192	8:1	22	96%
250 or more	5	61	12:1	1	20%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	13	97	7:1	18	138%
Manufacturing	23	122	5:1	21	91%
Construction	27	188	7:1	28	104%

Wholesale and Retail	65	271	4:1	66	102%
Hotels and Restaurants	42	240	6:1	29	69%
Transport and Storage	11	67	6:1	15	136%
Information and Communications	8	69	9:1	10	125%
Financial Services	3	16	5:1	4	133%
Business services	57	293	5:1	52	91%
Public Administration	6	32	5:1	2	33%
Education	17	76	4:1	27	159%
Health and Social Work	36	147	4:1	47	131%
Arts and other service activities	24	130	5:1	23	96%

Table B-6 Targets, sample used and interviews achieved by size and sector: North West (England) (2024)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2 to 4	270	1,501	6:1	234	87%
5 to 9	245	1,174	5:1	232	95%
10 to 24	237	971	4:1	265	112%

25 to 49	150	655	4:1	143	95%
50 to 99	68	408	6:1	80	118%
100 to 249	66	591	9:1	48	73%
250 or more	20	240	12:1	6	30%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	35	197	6:1	19	54%
Manufacturing	69	358	5:1	65	94%
Construction	81	587	7:1	69	85%
Wholesale and Retail	216	901	4:1	217	100%
Hotels and Restaurants	119	656	6:1	99	83%
Transport and Storage	41	256	6:1	45	110%
Information and Communications	32	273	9:1	27	84%
Financial Services	17	168	10:1	18	106%
Business services	206	1,039	5:1	196	95%
Public Administration	15	63	4:1	8	53%
Education	57	258	5:1	88	154%
Health and Social Work	102	433	4:1	113	111%
Arts and other	66	351	5:1	44	67%

service activities

Table B-7 Targets, sample used and interviews achieved by size and sector: South East (England) (2024)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2 to 4	392	2,062	5:1	434	111%
5 to 9	325	1,298	4:1	307	94%
10 to 24	318	1,239	4:1	333	105%
25 to 49	186	785	4:1	205	110%
50 to 99	84	420	5:1	80	95%
100 to 249	82	683	8:1	48	59%
250 or more	22	219	10:1	9	41%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	40	243	6:1	46	115%
Manufacturing	73	307	4:1	92	126%
Construction	123	717	6:1	130	106%
Wholesale and Retail	264	992	4:1	257	97%
Hotels and Restaurants	150	827	6:1	141	94%

Transport and Storage	47	235	5:1	37	79%
Information and Communications	72	520	7:1	61	85%
Financial Services	27	230	9:1	32	119%
Business services	302	1,429	5:1	299	99%
Public Administration	17	61	4:1	13	76%
Education	75	245	3:1	80	107%
Health and Social Work	125	463	4:1	134	107%
Arts and other service activities	94	437	5:1	94	100%

Table B-8 Targets, sample used and interviews achieved by size and sector: South West (England) (2024)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2 to 4	254	1,218	5:1	257	101%
5 to 9	218	772	4:1	206	94%
10 to 24	210	737	4:1	238	113%
25 to 49	120	459	4:1	139	116%
50 to 99	51	247	5:1	47	92%
100 to 249	48	388	8:1	33	69%
250 or more	11	122	11:1	9	82%

Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	57	342	6:1	67	118%
Manufacturing	55	223	4:1	70	127%
Construction	80	450	6:1	75	94%
Wholesale and Retail	170	569	3:1	164	96%
Hotels and Restaurants	114	475	4:1	98	86%
Transport and Storage	30	169	6:1	36	120%
Information and Communications	31	228	7:1	36	116%
Financial Services	16	150	9:1	21	131%
Business services	166	640	4:1	154	93%
Public Administration	13	41	3:1	15	115%
Education	44	148	3:1	65	148%
Health and Social Work	80	292	4:1	85	106%
Arts and other service activities	56	216	4:1	43	77%

Table B-9 Targets, sample used and interviews achieved by size and sector: West Midlands (England) (2024)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2 to 4	227	1,261	6:1	206	91%
5 to 9	195	866	4:1	179	92%
10 to 24	184	715	4:1	195	106%
25 to 49	110	472	4:1	116	105%
50 to 99	55	312	6:1	60	109%
100 to 249	54	474	9:1	42	78%
250 or more	13	125	10:1	10	77%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	34	192	6:1	30	88%
Manufacturing	70	320	5:1	62	89%
Construction	62	432	7:1	59	95%
Wholesale and Retail	172	679	4:1	155	90%
Hotels and Restaurants	85	528	6:1	91	107%
Transport and Storage	40	246	6:1	29	73%
Information and Communications	22	155	7:1	21	95%
Financial Services	13	101	8:1	11	85%

Business services	157	820	5:1	156	99%
Public Administration	12	51	4:1	6	50%
Education	45	171	4:1	57	127%
Health and Social Work	76	283	4:1	88	116%
Arts and other service activities	50	247	5:1	43	86%

Table B-10 Targets, sample used and interviews achieved by size and sector:
Yorkshire and the Humber (England) (2024)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2 to 4	206	1,151	6:1	195	95%
5 to 9	183	795	4:1	185	101%
10 to 24	177	661	4:1	180	102%
25 to 49	110	462	4:1	115	105%
50 to 99	50	297	6:1	64	128%
100 to 249	47	426	9:1	32	68%
250 or more	13	143	11:1	6	46%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	32	175	5:1	30	94%

Manufacturing	63	305	5:1	69	110%
Construction	63	401	6:1	63	100%
Wholesale and Retail	160	635	4:1	138	86%
Hotels and Restaurants	90	546	6:1	92	102%
Transport and Storage	32	198	6:1	32	100%
Information and Communications	20	138	7:1	13	65%
Financial Services	13	123	9:1	11	85%
Business services	137	702	5:1	145	106%
Public Administration	12	47	4:1	3	25%
Education	41	164	4:1	56	137%
Health and Social Work	74	268	4:1	87	118%
Arts and other service activities	49	233	5:1	38	78%

Table B-11 Targets, sample used and interviews achieved by size and sector:
Northern Ireland (2024)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2 to 4	940	5,020	5:1	822	87%
5 to 9	802	3,162	4:1	803	100%

10 to 24	767	3,341	4:1	862	112%
25 to 49	454	1,837	4:1	472	104%
50 to 99	210	1,067	5:1	268	128%
100 to 249	210	614	3:1	133	63%
250 or more	62	235	4:1	28	45%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	323	1,298	4:1	146	45%
Manufacturing	237	963	4:1	249	105%
Construction	272	1,607	6:1	238	88%
Wholesale and Retail	700	2,835	4:1	740	106%
Hotels and Restaurants	304	1,975	6:1	289	95%
Transport and Storage	127	802	6:1	113	89%
Information and Communications	74	332	4:1	66	89%
Financial Services	60	271	5:1	61	102%
Business services	440	1,880	4:1	492	112%
Public Administration	76	177	2:1	28	37%
Education	272	962	4:1	376	138%
Health and Social	341	1,226	4:1	387	113%

Work

Arts and other service activities	214	948	4:1	203	95%
--	------------	------------	------------	------------	------------

Table B-12 Targets, sample used and interviews achieved by size and sector:
Wales (2024)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2 to 4	1,490	7,597	5:1	1,600	107%
5 to 9	1,275	5,287	4:1	1,341	105%
10 to 24	1,221	4,964	4:1	1,449	119%
25 to 49	723	2,585	4:1	686	95%
50 to 99	334	1,462	4:1	355	106%
100 to 249	337	875	3:1	143	42%
250 or more	95	387	4:1	31	33%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	340	1,516	4:1	316	93%
Manufacturing	280	1,208	4:1	313	112%
Construction	425	2,956	7:1	391	92%
Wholesale and Retail	954	4,030	4:1	996	104%
Hotels and	615	3,056	5:1	530	86%

Restaurants

Transport and Storage	183	944	5:1	173	95%
Information and Communications	127	738	6:1	109	86%
Financial Services	75	393	5:1	85	113%
Business services	809	3,395	4:1	832	103%
Public Administration	147	370	3:1	88	60%
Education	318	1,202	4:1	379	119%
Health and Social Work	586	2,074	4:1	693	118%
Arts and other service activities	344	1,465	4:1	384	112%

Table B-13 Targets, sample used and interviews achieved by size and sector:
Scotland (2024)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2 to 4	1,404	7,847	6:1	1,317	94%
5 to 9	1,198	4,775	4:1	1,200	100%
10 to 24	1,146	4,753	4:1	1,236	108%
25 to 49	679	3,041	4:1	730	108%
50 to 99	314	2,027	6:1	349	111%
100 to 249	314	1,854	6:1	199	63%

250 or more	93	658	7:1	49	53%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	340	1,516	4:1	316	93%
Manufacturing	280	1,208	4:1	313	112%
Construction	425	2,956	7:1	391	92%
Wholesale and Retail	954	4,030	4:1	996	104%
Hotels and Restaurants	615	3,056	5:1	530	86%
Transport and Storage	183	944	5:1	173	95%
Information and Communications	127	738	6:1	109	86%
Financial Services	84	545	6:1	72	86%
Business services	896	4,064	5:1	814	91%
Public Administration	136	587	4:1	69	51%
Education	252	1,848	7:1	407	162%
Health and Social Work	480	1,652	3:1	515	107%
Arts and other service activities	378	1,811	5:1	375	99%

Table B-14 Targets, sample used and interviews achieved by size and sector: Total

(2022)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2-4	21,228	177,404	8:1	20,671	97%
5-9	18,084	93,780	5:1	17,487	97%
10-24	17,298	88,414	5:1	17,546	101%
25-49	10,221	49,104	5:1	9,403	92%
50-99	4,718	29,266	6:1	4,603	98%
100-249	4,718	23,920	5:1	2,543	54%
250+	1,363	12,971	10:1	665	49%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	3,334	25,934	8:1	3,210	96%
Manufacturing	4,877	26,993	6:1	5,305	109%
Construction	5,966	52,822	9:1	5,196	87%
Wholesale and Retail	15,101	84,901	6:1	15,694	104%
Hotels and Restaurants	8,403	62,318	7:1	8,087	96%
Transport and Storage	2,983	19,781	7:1	2,456	82%
Information and Communications	2,859	19,172	7:1	2,061	72%

Financial Services	1,545	8,900	6:1	991	64%
Business services	15,076	89,545	6:1	13,036	86%
Public Administration	1,248	7,207	6:1	656	53%
Education	4,148	17,348	4:1	4,654	112%
Health and Social Work	7,069	33,459	5:1	7,186	102%
Arts and other service activities	5,021	28,689	6:1	4,386	87%

Table B-15 Targets, sample used and interviews achieved by size and sector: East of England (2022)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2-4	1,913	17,574	9:1	1,850	97%
5-9	1,576	8,797	6:1	1,614	102%
10-24	1,495	8,479	6:1	1,591	106%
25-49	892	4,997	6:1	875	98%
50-99	413	2,938	7:1	489	118%
100-249	407	2,304	6:1	269	66%
250+	107	1,131	11:1	55	51%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and	277	2,394	9:1	274	99%

Utilities

	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Manufacturing	433	2,592	6:1	509	118%
Construction	643	6,038	9:1	564	88%
Wholesale and Retail	1,285	8,168	6:1	1,389	108%
Hotels and Restaurants	623	5,487	9:1	687	110%
Transport and Storage	289	2,127	7:1	283	98%
Information and Communications	265	1,955	7:1	203	77%
Financial Services	94	736	8:1	74	79%
Business services	1,400	8,814	6:1	1,201	86%
Public Administration	93	567	6:1	67	72%
Education	384	1,744	5:1	505	132%
Health and Social Work	586	3,144	5:1	610	104%
Arts and other service activities	431	2,670	6:1	377	87%

Table B-16 Targets, sample used and interviews achieved by size and sector: East Midlands (2022)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2-4	1,643	12,421	8:1	1,757	107%

5-9	1,408	6,451	5:1	1,491	106%
10-24	1,301	5,984	5:1	1,485	114%
25-49	791	3,221	4:1	809	102%
50-99	362	1,856	5:1	396	109%
100-249	368	1,750	5:1	208	57%
250+	102	911	9:1	52	51%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	269	1,531	6:1	249	93%
Manufacturing	530	2,182	4:1	567	107%
Construction	476	4,565	10:1	536	113%
Wholesale and Retail	1,147	6,920	6:1	1,536	134%
Hotels and Restaurants	567	3,766	7:1	562	99%
Transport and Storage	344	1,550	5:1	228	66%
Information and Communications	162	846	5:1	117	72%
Financial Services	70	430	6:1	82	117%
Business services	1,070	5,474	5:1	995	93%
Public Administration	93	362	4:1	64	69%
Education	324	1,106	3:1	337	104%

Health and Social Work	550	2,375	4:1	599	109%
Arts and other service activities	373	1,663	4:1	326	87%

Table B-17 Targets, sample used and interviews achieved by size and sector:
London (2022)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2-4	2,570	23,733	9:1	2,340	91%
5-9	2,088	13,192	6:1	1,806	86%
10-24	1,986	12,604	6:1	1,696	85%
25-49	1,120	6,844	6:1	823	73%
50-99	545	4,417	8:1	418	77%
100-249	558	3,616	6:1	274	49%
250+	171	2,253	13:1	71	42%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	74	605	8:1	47	64%
Manufacturing	247	1,848	7:1	245	99%
Construction	588	5,947	10:1	483	82%
Wholesale and Retail	1,411	10,227	7:1	1,259	89%

Hotels and Restaurants	994	9,032	9:1	857	86%
Transport and Storage	264	2,345	9:1	159	60%
Information and Communications	699	5,331	8:1	478	68%
Financial Services	288	2,718	9:1	230	80%
Business services	2,633	17,751	7:1	1,934	73%
Public Administration	97	665	7:1	28	29%
Education	431	2,204	5:1	564	131%
Health and Social Work	669	4,049	6:1	674	101%
Arts and other service activities	643	4,305	7:1	470	73%

Table B-18 Targets, sample used and interviews achieved by size and sector: North East (2022)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2-4	1,236	9,836	8:1	1,293	105%
5-9	1,079	5,514	5:1	1,171	109%
10-24	1,018	5,312	5:1	1,244	122%
25-49	626	2,467	4:1	631	101%
50-99	289	1,383	5:1	309	107%

100-249	291	888	3:1	120	41%
250+	84	458	5:1	25	30%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	181	1,145	6:1	192	106%
Manufacturing	326	1,556	5:1	342	105%
Construction	358	2,535	7:1	322	90%
Wholesale and Retail	872	4,963	6:1	1,056	121%
Hotels and Restaurants	564	4,656	8:1	601	107%
Transport and Storage	165	939	6:1	140	85%
Information and Communications	110	630	6:1	77	70%
Financial Services	60	346	6:1	65	108%
Business services	805	4,140	5:1	741	92%
Public Administration	87	263	3:1	55	63%
Education	263	959	4:1	314	119%
Health and Social Work	496	2,028	4:1	544	110%
Arts and other service activities	336	1,771	5:1	344	102%

Table B-19 Targets, sample used and interviews achieved by size and sector: North West (2022)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2-4	1,902	17,772	9:1	1,623	85%
5-9	1,662	9,762	6:1	1,471	89%
10-24	1,567	9,325	6:1	1,545	99%
25-49	988	5,809	6:1	933	94%
50-99	444	3,404	8:1	449	101%
100-249	448	2,630	6:1	237	53%
250+	129	1,439	11:1	63	49%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	244	2,423	10:1	228	93%
Manufacturing	483	3,169	7:1	477	99%
Construction	534	4,972	9:1	382	72%
Wholesale and Retail	1,434	9,710	7:1	1,450	101%
Hotels and Restaurants	754	6,887	9:1	794	105%
Transport and Storage	282	2,112	7:1	212	75%
Information and Communications	214	1,579	7:1	136	64%

Financial Services	96	752	8:1	60	63%
Business services	1,429	9,420	7:1	1,086	76%
Public Administration	105	729	7:1	38	36%
Education	390	1,788	5:1	425	109%
Health and Social Work	708	3,900	6:1	686	97%
Arts and other service activities	467	2,990	6:1	347	74%

Table B-20 Targets, sample used and interviews achieved by size and sector: South East (2022)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2-4	2,378	19,038	8:1	2,730	115%
5-9	1,972	8,483	4:1	2,153	109%
10-24	1,866	8,626	5:1	2,156	116%
25-49	1,109	4,850	4:1	1,092	98%
50-99	504	2,847	6:1	499	99%
100-249	508	3,095	6:1	337	66%
250+	134	1,756	13:1	78	58%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target

Primary Sector and Utilities	244	1,619	7:1	274	112%
Manufacturing	453	2,155	5:1	497	110%
Construction	719	6,713	9:1	769	107%
Wholesale and Retail	1,546	7,899	5:1	1,923	124%
Hotels and Restaurants	821	5,629	7:1	948	115%
Transport and Storage	303	1,722	6:1	272	90%
Information and Communications	474	2,814	6:1	352	74%
Financial Services	123	799	6:1	115	93%
Business services	1,862	11,023	6:1	1,981	106%
Public Administration	108	533	5:1	72	67%
Education	465	1,877	4:1	535	115%
Health and Social Work	778	3,172	4:1	732	94%
Arts and other service activities	575	3,108	5:1	575	100%

Table B-20 Targets, sample used and interviews achieved by size and sector: South West (2022)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
-------------	-----------------------	--------------------	--------------	----------------------------	----------------------------

2-4	1,853	16,286	9:1	1,938	105%
5-9	1,569	8,372	5:1	1,630	104%
10-24	1,475	7,980	5:1	1,639	111%
25-49	876	4,568	5:1	880	100%
50-99	386	2,619	7:1	418	108%
100-249	382	1,981	5:1	208	54%
250+	102	996	10:1	53	52%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	426	3,816	9:1	421	99%
Manufacturing	416	2,307	6:1	491	118%
Construction	567	4,831	9:1	447	79%
Wholesale and Retail	1,203	7,402	6:1	1,472	122%
Hotels and Restaurants	779	6,173	8:1	908	117%
Transport and Storage	224	1,488	7:1	187	83%
Information and Communications	234	1,539	7:1	158	68%
Financial Services	87	601	7:1	52	60%
Business services	1,234	7,353	6:1	1,155	94%
Public Administration	99	557	6:1	64	65%

Education	339	1,463	4:1	396	117%
Health and Social Work	628	3,121	5:1	648	103%
Arts and other service activities	407	2,351	6:1	367	90%

Table B-21 Targets, sample used and interviews achieved by size and sector: West Midlands (2022)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2-4	1,769	16,033	9:1	1,592	90%
5-9	1,495	8,572	6:1	1,344	90%
10-24	1,393	7,883	6:1	1,427	102%
25-49	847	4,719	6:1	799	94%
50-99	401	2,882	7:1	406	101%
100-249	396	2,149	5:1	202	51%
250+	114	1,133	10:1	47	41%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	267	2,427	9:1	240	90%
Manufacturing	556	3,490	6:1	606	109%
Construction	459	4,270	9:1	389	85%
Wholesale and	1,289	8,243	6:1	1,237	96%

Retail

Hotels and Restaurants	600	5,320	9:1	581	97%
Transport and Storage	293	2,178	7:1	206	70%
Information and Communications	189	1,359	7:1	160	85%
Financial Services	79	577	7:1	44	56%
Business services	1,262	7,934	6:1	1,016	81%
Public Administration	87	502	6:1	47	54%
Education	349	1,564	4:1	331	95%
Health and Social Work	590	3,186	5:1	618	105%
Arts and other service activities	395	2,449	6:1	342	87%

Table B-22 Targets, sample used and interviews achieved by size and sector:
Yorkshire and the Humber (2022)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2-4	1,677	13,848	8:1	1,799	107%
5-9	1,448	7,136	5:1	1,631	113%
10-24	1,372	5,870	4:1	1,463	107%
25-49	842	3,271	4:1	819	97%

50-99	388	2,090	5:1	408	105%
100-249	380	1,948	5:1	202	53%
250+	109	1,006	9:1	53	49%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	270	2,173	8:1	311	115%
Manufacturing	517	2,922	6:1	599	116%
Construction	486	4,447	9:1	478	98%
Wholesale and Retail	1,249	6,215	5:1	1,425	114%
Hotels and Restaurants	668	4,922	7:1	757	113%
Transport and Storage	262	1,656	6:1	278	106%
Information and Communications	168	968	6:1	141	84%
Financial Services	82	498	6:1	64	78%
Business services	1,101	5,627	5:1	988	90%
Public Administration	103	373	4:1	64	62%
Education	330	1,211	4:1	325	98%
Health and Social Work	589	2,230	4:1	577	98%
Arts and other service activities	391	2,033	5:1	368	94%

Table B-23 Targets, sample used and interviews achieved by size and sector:
Northern Ireland (2022)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2-4	1,010	7,860	8:1	849	84%
5-9	851	4,947	6:1	872	102%
10-24	809	4,583	6:1	858	106%
25-49	481	2,104	4:1	452	94%
50-99	224	1,199	5:1	216	96%
100-249	221	589	3:1	123	56%
250+	64	321	5:1	30	47%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	347	2,082	6:1	179	52%
Manufacturing	250	1,423	6:1	285	114%
Construction	285	2,003	7:1	175	61%
Wholesale and Retail	749	4,571	6:1	828	111%
Hotels and Restaurants	304	2,422	8:1	232	76%
Transport and Storage	137	1,050	8:1	106	77%

Information and Communications	80	517	6:1	63	79%
Financial Services	70	468	7:1	80	114%
Business services	454	2,478	5:1	430	95%
Public Administration	84	317	4:1	41	49%
Education	293	1,164	4:1	381	130%
Health and Social Work	365	1,671	5:1	394	108%
Arts and other service activities	242	1,467	6:1	206	85%

Table B-24 Targets, sample used and interviews achieved by size and sector:
Scotland (2022)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
2-4	1,516	12,726	8:1	1,441	95%
5-9	1,268	6,921	5:1	1,205	95%
10-24	1,193	6,497	5:1	1,276	107%
25-49	719	3,617	5:1	666	93%
50-99	335	2,161	6:1	320	96%
100-249	331	1,951	6:1	212	64%
250+	94	1,045	11:1	87	93%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall

					target
Primary Sector and Utilities	370	3,135	8:1	423	114%
Manufacturing	301	1,912	6:1	365	121%
Construction	436	3,623	8:1	329	75%
Wholesale and Retail	965	5,892	6:1	1,109	115%
Hotels and Restaurants	614	4,336	7:1	608	99%
Transport and Storage	206	1,482	7:1	207	100%
Information and Communications	141	988	7:1	100	71%
Financial Services	88	594	7:1	67	76%
Business services	975	5,676	6:1	823	84%
Public Administration	159	1,661	10:1	55	35%
Education	273	1,239	5:1	242	89%
Health and Social Work	520	2,327	4:1	524	101%
Arts and other service activities	408	2,221	5:1	355	87%

Table B-25 Targets, sample used and interviews achieved by size and sector:
Wales (2022)

Size	Overall target	Sample used	Ratio	Interviews achieved	% of overall
------	----------------	-------------	-------	---------------------	--------------

					target
2-4	1,434	10,277	7:1	1,459	102%
5-9	1,212	5,633	5:1	1,099	91%
10-24	1,136	5,271	5:1	1,166	103%
25-49	680	2,637	4:1	624	92%
50-99	319	1,470	5:1	275	86%
100-249	318	1,019	3:1	151	47%
250+	91	522	6:1	51	56%
Sector	Overall target	Sample used	Ratio	Interviews achieved	% of overall target
Primary Sector and Utilities	387	2,584	7:1	372	96%
Manufacturing	348	1,437	4:1	322	93%
Construction	400	2,878	7:1	322	81%
Wholesale and Retail	945	4,691	5:1	1,010	107%
Hotels and Restaurants	603	3,688	6:1	552	92%
Transport and Storage	204	1,132	6:1	178	87%
Information and Communications	111	646	6:1	76	68%
Financial Services	56	381	7:1	58	104%
Business services	770	3,855	5:1	686	89%
Public	143	678	5:1	61	43%

Administration

Education	304	1,029	3:1	299	98%
Health and Social Work	579	2,256	4:1	580	100%
Arts and other service activities	340	1,661	5:1	309	91%

[Go to top](#)

Annex C: Questions from ESS 2022 removed for ESS 2024

Table C-1 Questions from ESS 2022 that were not included in ESS 2024

Question Number	Question area	Question text
SA4A	Screener & Firmographics	Are the headquarters of your organisation based in the UK?
PC1	EPS Recruitment	Has your establishment had any vacancies for full time or part time staff in the past 12 months, regardless of whether you managed to fill them or not?
PC4A	EPS Recruitment	Over the last 12 months has your establishment done any of the following to fill vacancies...?
PC6B	EPS Recruitment	Has anyone recruited at this site in the last 12 months been aged 16 to 18?
PC6C	EPS Recruitment	Has anyone recruited been aged 19 to 24?
PC6D	EPS Recruitment	Can I check, has this site recruited anyone aged under 25 in the last 12 months?
NC6DI	EPS	Has anyone recruited in the last 12 months been

	Recruitment	aged 25 to 49?
PC6E	EPS Recruitment	And has anyone recruited in the last 12 months been aged 50 or over?
NC6G	EPS Recruitment	How well prepared for work have the recruits aged 50 or over been?
PC10NW	EPS Recruitment	Thinking of the last young person aged under 25 that your site recruited, did you use any of the following to fill the role...?
SSF7C	Workforce Development	Was this online training or e-learning....?
SF7	Workforce Development	And has your site done any of the following to aid the development of your employees in the last 12 months?
PD12	Workforce Development	Why hasn't your site used the teaching or training services of external training providers in the last 12 months?
PD14	Vocational Qualifications	For which of the following reasons has your site NOT arranged training for your employees that was designed to lead to vocational qualifications?
PD1	Information and Advice on Training	<p>Now turning to the support that is available to businesses and organisations like yours to develop the skills of your employees.</p> <p>In the past 12 months, has anyone at this site sought or received information, advice or more practical help on skills or training-related issues from people external to your organisation?</p>
PD1A	Information and Advice on Training	And has your site experienced any skills or training-related issues in the last 12 months where you might have needed information, help or advice?
PD2	Information and	Has anyone at this site received advice or help

	Advice on Training	on skills and training related issues in the last 12 months from any of the following?
PD36	Information and Advice on Training	In the past 12 months has your site worked with another employer to develop skills or expertise in your workforce by, for example, accessing, sharing or providing training?
PD35C	Apprenticeships	When recruiting someone to an apprenticeship, has your site used work experience placements to determine whether the individual is suitable for an apprenticeship prior to actually recruiting them as an apprentice?
PD35A	Apprenticeships	I'd now like to ask you about Traineeships, a government programme introduced in August 2013. These offer 16 to 24 year olds the opportunity to undertake substantial work experience placements alongside support with basic skills such as Maths and English to help them progress onto an apprenticeship, or secure sustainable employment.
		Which of the following best describes your awareness of Traineeships?
PD35B	Apprenticeships	In the last 12 months have you had anyone undertake a Traineeship at this site?
ND41	Apprenticeships	How interested, if at all, would your site be in offering work placement opportunities to young people via the Traineeship programme?

[Go to top](#)

Annex D: Questions from ESS 2019 removed for ESS 2022

Table D-1 Questions from ESS 2019 that were not included in ESS 2022

Question	Original	Question area	Question text
----------	----------	---------------	---------------

Number	survey		
SA11	ESS	Screener & Firmographics	Is this primarily within the EU, or primarily outside of the EU?
SA12	ESS	Screener & Firmographics	Can I check, [IF PRIVATE SECTOR (SA8=1): do you sell any of your products and services] [IF PUBLIC/THIRD SECTOR (SA8=2-5): does your establishment serve the population at all] outside the UK but within the EU?
SC16	ESS	Recruitment & Skill Shortage Vacancies	When you have recruited, or tried to recruit, workers who are non-UK nationals, were these EU nationals, non-EU nationals, or both?
SD1b	ESS	Workforce composition and skills gaps	<p>Approximately how many of your [NUMBER FROM SA1 / RANGE FROM SA1DUM] current staff, if any, are from EU member states and are not UK citizens?</p> <p>ADD IF NECESSARY: This information is solely to provide data on the possible impact on businesses of the UK's decision to leave the EU. Your answers are fully confidential and anonymous.</p>
SD1bRAN	ESS	Workforce composition and skills gaps	Can you tell me approximately what proportion of your [NUMBER FROM SA1 / RANGE FROM SA1DUM] employees, if any, are from EU member states and are not UK citizens?
ND1b	ESS 2019	Workforce composition and skills gaps	And approximately how many of your current staff, if any, are not UK citizens and are from countries outside of the EU?

ADD IF NECESSARY: This information is solely to provide data on the possible impact on businesses of the UK's decision to leave the EU. Your answers are fully confidential and anonymous.

ND1bRAN	ESS 2019	Workforce composition and skills gaps	Can you tell me approximately what proportion of your current staff, if any, are not UK citizens and are from countries outside of the EU?
SD14a	ESS	Workforce composition and skills gaps	Have you recruited, or tried to recruit, workers who are non-UK nationals in order to overcome the fact that some staff are not fully proficient in their job?
SD14b	ESS	Workforce composition and skills gaps	In terms of recruiting workers who are non-UK nationals, are these EU nationals, non-EU nationals, or both?
PD16	EPS	Workforce development	To what extent would you agree or disagree that employees achieving vocational qualifications leads to...
PD17	EPS	Workforce development	And to what extent would you agree or disagree that vocational qualifications...?
PD22A	EPS	Apprenticeships & Traineeships	How many current Apprentices do you have at this site?
PD22B	EPS	Apprenticeships & Traineeships	Is it approximately...?
ND23c	ESS 2019	Apprenticeships & Traineeships	How many apprentices in total have you had at this site over the past 3 years?

ND23CRAN	ESS 2019	Apprenticeships & Traineeships	Is it approximately...?
ND23d	ESS 2019	Apprenticeships & Traineeships	What proportion of those apprentices you've had in the last two to three years have been retained as a permanent member of staff, or in a long-term paid role, after they completed their apprenticeship? Would you say it has been...
ND23e	ESS 2019	Apprenticeships & Traineeships	What were the reasons for not retaining <ND23d=4: any> <ND23d=2/3: some> of the apprentices that you've had at your site over the last 2-3 years?
PD25i	EPS	Apprenticeships & Traineeships	Do any of your apprentices receive training delivered by a training provider either on their or your premises?
PD25ii	EPS	Apprenticeships & Traineeships	And do you as the employer provide formal training sessions as part of the apprenticeship?
PD25iii	EPS	Apprenticeships & Traineeships	What type of training provider delivers the training for your apprentices. Is it...?
PD26	EPS	Apprenticeships & Traineeships	Typically how long are the Apprenticeships you offer intended to last from start to finish?
PD27D	EPS	Apprenticeships & Traineeships	Since your site first started offering formal Apprenticeships, has the number of apprentices that you have at this site increased, decreased or remained about the same?

ND29nw	ESS 2019	Apprenticeships & Traineeships	Are you aware of the following recent apprenticeship policy changes?
ND30nw	ESS 2019	Apprenticeships & Traineeships	As a result of these recent reforms to apprenticeships, has there been a change to any of the following at this site?
ND31nw	ESS 2019	Apprenticeships & Traineeships	And as a result of those same apprenticeship reforms, have the following increased, decreased or stopped altogether at this site?
ND36	ESS 2019	Apprenticeships & Traineeships	<p>I'd now like to ask you about Traineeships in Wales. The Traineeships programme in Wales is a programme for young people aged 16 to 18 which aims to give young people the skills they need to get a job or progress to further learning at a higher level – such as an apprenticeship or further education.</p> <p>Prior to this interview, had you heard of the Traineeships programme in Wales?</p>
ND37	ESS 2019	Apprenticeships & Traineeships	Have you taken on anyone at this site to do a Traineeship as part of the Traineeships programme in Wales?
ND38	ESS 2019	Apprenticeships & Traineeships	What are the main reasons you decided to take someone on to do a Traineeship?
ND39	ESS 2019	Apprenticeships & Traineeships	What are the main reasons why you have not taken on anyone at

ND40	ESS 2019	Apprenticeships & Traineeships	How interested, if at all, would your establishment be in offering work placement opportunities to young people via the Traineeship programme in Wales. Would you be...?
------	-------------	-----------------------------------	--

[Go to top](#)

Annex E: Occupational Coding

The occupational data collected in the survey were collected both pre-coded and verbatim. The former included the occupational breakdown of employment (question SD5c to SD8) where respondents were asked how many of their workforce fell into each of the 9 major (1-digit) Standard Occupation Classification (SOC) 2020 categories (Managers, Directors and Senior Officials through to Elementary Occupations). However, on vacancy measures (for example the occupations in which vacancies existed at the time of the interview – question SC7) this information was collected verbatim and then coded at the analysis stage, where possible to a 4-digit level SOC. The occupational data covering vacancies (and other derivatives such as skill-shortage vacancies) and the current workforce composition (and derivatives such as skills gaps) are published in the Official Statistics publication. Due to the smaller overall sample size in 2024, 4 digit SOC data will not be published as Official Statistics or used in published reports. The table below gives examples of the types of occupations included within occupational bandings.

Table E-1 Examples of occupations that were included within each occupational group

Occupational group	Primary sectors (Agriculture, manufacturing, construction etc)	Service sectors (retail, business, finance, transport etc)	Public sector (Public Admin, Health, Education etc)
Managers,	Site managers,	Directors,	Police inspectors and

Directors and Senior Officials	Department Heads, Shift Managers (not supervisors)	Managers / Branch/site managers, shift managers (not supervisors)	above, department heads, officers in the armed forces, Senior Officials
Professionals	Professional engineers, software and IT professionals, accountants, chemists, scientific researchers,	Solicitors, lawyers, accountants, IT professionals, economists, architects, actuaries, investment analysts and advisers	Doctors, nurses, midwives, paramedics, teachers, social workers, librarians, psychotherapists
Associate Professionals	Science and engineering technicians, IT technicians, accounting technicians, lab technicians	Insurance underwriters, writers, buyers, estate agents	Junior police /fire/prison officers, community workers, H&S officers, housing officers
Administrative staff	Secretaries, receptionists, PAs, bookkeepers	Secretaries, receptionists, PAs, clerks	Secretaries, receptionists, PAs, local government officers and assistants, office assistants, library and database assistants
Skilled Trades	Farmers, electricians, machine setters / tool makers, carpenters, plasterers	Motor mechanics, chefs, printers, TV engineers, butchers	Chefs, cooks
Caring, Leisure and Other Service	Care assistants	Travel agents, travel assistants, hairdressers,	Care assistants, home carers, ambulance staff, pest

Occupations	housekeepers	control, dental nurses, caretakers, traffic wardens,	
Sales and customer service occupations	Customer facing roles: sales staff, telephonists and call centre agents	Sales assistants and retail cashiers, telesales, call centre agents, communication operators, market research interviewers	Customer care operations
Process, plant and machine operatives	Routine operatives, drivers, machine operators, sorters and assemblers	HGV, van, fork-lift, bus and taxi drivers	Drivers, vehicle inspectors
Elementary occupations	Labourers, packers, goods handling and storage staff	Bar staff, shelf fillers, catering assistants, waiters/waitresses, cleaners	Labourers, cleaners, road sweepers, security guards

ESS 2024 is the first in the series to be coded to SOC2020 from the outset, with previous waves of the survey instead using SOC2010 classifications. ESS 2022 data was coded to SOC 2010 categories to ensure the results could be compared with those from previous waves of ESS. However, a separate dataset was produced which coded the occupational data to SOC2020, so that future waves of ESS can be compared back to ESS 2022.

Minor changes were made to occupational categories including, but not limited to:

- Updating the descriptions of which jobs were classified in which occupational level e.g., paramedics and graphic designers were reclassified as professionals, rather than associate professionals
- Renaming of codes as a result of technological developments and innovation e.g.,

- renaming IT specialist managers (code 2133 in 2010), to IT managers (code 2132 in 2020)
- Disaggregating some job groups into separate categories e.g., splitting out “managers” from “directors” into separate codes in relation to those working in storage and transport
- Aggregating other job groups into the same category e.g., air traffic controllers, and aircraft pilots and flight engineers into 1 code (previously separate in 2010).

The process of recoding from SOC2010 to SOC2020 involved identifying (like the examples above) the particular SOC2010 codes affected by changes between the two classification systems, and then reviewing the verbatims for these cases and re-coding according to SOC2020. During the recoding process from SOC2010 to SOC2020 the research contractors picked up some cases outside of those targeted for review where they felt a more suitable occupational code applied. These were reclassified accordingly.

A full list of the changes can be found on the [ONS website \(opens in new tab\)](#).

[Go to top](#)

Annex F: Reassurance email

SURVEY REFERENCE: [KEY NUMBER]

UK Employer Skills Survey 2024

Thank you for considering participating in this important research.

The UK Employer Skills Survey 2024 is being conducted by IFF Research, an independent market research organisation, on behalf of the Department for Education (DfE) [SCOTLAND (COUNTRY=3): and partners including the Scottish Government] [WALES (COUNTRY=4: and partners including the Welsh Government] [NI (COUNTRY=2): and partners including the Department for the Economy in Northern Ireland].

The survey gives you the opportunity to share your views on the challenges your site faces in relation to skills, training and employment and will help to shape government policy in these areas, ensuring organisations like yours have the support they need to address these challenges in the future. We hope to speak to a wide range of

organisations to ensure that the views expressed are representative of all employers in your sector.

We hope very much that you are able to take part. Participation will involve a telephone interview with an IFF interviewer lasting around 20 minutes at a time that is convenient for you. More information about the survey (including FAQs) can be found at www.skillssurvey.co.uk.

For results from the previous 2022 survey please see the Gov.UK website: <https://www.gov.uk/government/statistics/employer-skills-survey-2022>. [(IF COUNTRY=2): For 2022 results from data collected with employers in Northern Ireland specifically, please see Employer Skills Survey 2022 | Department for the Economy (economy-ni.gov.uk)] [(IF COUNTRY=3): For 2022 results from data collected with employers in Scotland specifically, please see <https://www.gov.scot/publications/uk-employer-skills-survey-2022-scotland-report/>] [(IF COUNTRY=4): For 2022 results from data collected with employers in Wales specifically, please see Employer Skills Survey: 2022 (Wales report) | GOV.WALES]

If you have any queries concerning the format or content of the interview, you would like to book an appointment with an IFF interviewer, or you would like to opt out of this research, please contact IFF via email at SkillsSurvey2024@iffresearch.com.

Your organisation has been selected for participation at random from a combination of Market Location's Business Database and the ONS Inter-Departmental Business Register (IDBR). Your replies will be treated in the strictest confidence under the Code of Conduct of the Market Research Society, and in accordance with the Data Protection Act (2018) and the General Data Protection Regulations (GDPR). All data collected will be pseudonymised before it is shared with DfE for analysis purposes, meaning no information which could be used to identify you or your organisation will be shared with DfE. More information about how your data can be used, and the pseudonymisation process, can be found via our privacy notice on the survey website linked above.

If you would like to contact someone at DfE about this research, please contact [REDACTED] via email at Employer.SURVEYS@education.gov.uk

Thank you for your assistance.

Yours sincerely,

[Go to top](#)

Annex G: Working from home version of reassurance email

UK Employer Skills Survey 2024

Dear [NAME COLLECTED VIA WFH OUTCOMES]

IFF Research, an independent market research agency, has been commissioned by the Department for Education (DfE) [SCOTLAND (COUNTRY=3): and partners including the Scottish Government] [WALES (COUNTRY=4: and partners including the Welsh Government] [NI (COUNTRY=2): and partners including the Department for the Economy in Northern Ireland], to undertake the UK Employer Skills Survey.

We recently tried to get in touch but were informed by a colleague that you are not always in the office to accept calls. We are therefore reaching out to see whether you would be willing to help us with this study. If you are happy to take part on behalf of your site at <POSTCODE>, please [click here](#) to leave your telephone number.

The survey gives you the opportunity to share your views on the challenges your site faces in relation to skills, training and employment and will help to shape government policy in these areas, ensuring organisations like yours have the support they need to address these challenges in the future. We hope to speak to a wide range of organisations to ensure that the views expressed are representative of all employers in your sector.

We hope very much that you are able to take part. Participation in this survey will involve a telephone interview with an IFF interviewer lasting around 20 minutes at a time that is convenient for you. More information about the survey (including FAQs)

can be found at <http://www.skillssurvey.co.uk>.

For results from the previous 2022 survey please see the Gov.UK website: <https://www.gov.uk/government/statistics/employer-skills-survey-2022>. [(IF COUNTRY=2): For 2022 results from data collected with employers in Northern Ireland specifically, please see Employer Skills Survey 2022 | Department for the Economy (economy-ni.gov.uk)] [(IF COUNTRY=3): For 2022 results from data collected with employers in Scotland specifically, please see <https://www.gov.scot/publications/uk-employer-skills-survey-2022-scotland-report/>] [(IF COUNTRY=4): For 2022 results from data collected with employers in Wales specifically, please see Employer Skills Survey: 2022 (Wales report) | GOV.WALES]

If you have any queries concerning the format or content of the interview, you would like to book an appointment with an IFF interviewer, or would like to opt out of this research, please contact us IFF at SkillsSurvey2024@iffresearch.com. If you would like to contact someone at DfE about this research, please contact [REDACTED] via email at Employer.SURVEYS@education.gov.uk.

Your organisation has been selected for participation at random from a combination of Market Location's Business Database and the ONS Inter-Departmental Business Register (IDBR). Your replies will be treated in the strictest confidence under the Code of Conduct of the Market Research Society, and in accordance with the Data Protection Act (2018) and the General Data Protection Regulations (GDPR). All data collected will be pseudonymised before it is shared with DfE for analysis purposes, meaning no information which could be used to identify you or your organisation will be shared with DfE. More information about how your data can be used, and the pseudonymisation process, can be found via our privacy notice on the survey website linked above.

If you would like to contact someone at DfE about this research, please contact [REDACTED] via email at Employer.SURVEYS@education.gov.uk.

Thank you for your assistance.

Yours sincerely,

[Go to top](#)

Annex H: Response rates by subgroup for the core survey

Table H-1 Interviews achieved and response rate broken down by nation, size and sector

Survey group	Interviews achieved (2022)	Response rate (2022)	Interviews achieved (2024)	Response rate (2024)
Total	72,918	53%	22,712	65%
Nation	Interviews achieved (2022)	Response rate (2022)	Interviews achieved (2024)	Response rate (2024)
England	59,486	52%	8,639	63%
Northern Ireland	3,400	53%	3,388	66%
Scotland	5,207	53%	5,080	63%
Wales	4,825	57%	5,605	71%
Size	Interviews achieved (2022)	Response rate (2022)	Interviews achieved (2024)	Response rate (2024)
2 to 4	20,671	47%	6,097	63%
5 to 24	35,033	57%	10,929	70%
25 to 49	9,403	59%	3,054	66%
50 to 99	4,603	54%	1,602	65%

100 to 249	2,543	45%	844	44%
250 or more	665	34%	186	32%
Sector	Interviews achieved (2022)	Response rate (2022)	Interviews achieved (2024)	Response rate (2024)
Primary Sector and Utilities	3,210	49%	1,131	65%
Manufacturing	5,305	50%	1,487	69%
Construction	5,196	43%	1,711	54%
Wholesale and Retail	15,694	53%	4,440	67%
Hotels and Restaurants	8,087	58%	2,333	68%
Transport and Storage	2,456	45%	784	54%
Information and Communications	2,061	44%	634	51%
Financial Services	991	37%	393	45%
Business Services	13,036	49%	3,904	61%
Public administration	656	49%	251	67%
Education	4,654	73%	1,758	77%
Health and Social Work	7,186	67%	2,417	83%
Arts and Other Services	4,386	57%	1,469	66%

[Go to top](#)

Annex I: Edit specification

Table I-1 Edit specification for ESS 2024

Edit Number	Objective of edit	Condition	Force/Action
EDIT 1	Check that all SICs given at SA7 are valid SIC07 codes	If SA6 = 2	Any records where SA6=2 will need to have the SIC at SA7 validated. Recode where possible, recontact if necessary.
EDIT 2	To ensure that all SOC codes are valid at SC7 (4 DIGITS)	If SOC at SC7 is not in full SOC file provided	Recode where possible, recontact if necessary. Coding to 1 or 2 digit SOC is acceptable if there is not sufficient information, although this should only be the case for a small minority of records (i.e. less than 1%). For any records that are entirely uncodable, use 4 zeros "0000".
EDIT 3	To check that public sector ('local or central government financed body') definition given at SA8 is consistent with SIC code	If SA8 is '3' or '4' and first 2 digits of SIC are not '84', '85' or "86'	Each record to be judged on an individual basis by company name and activity.
EDIT 4	To check legitimacy of high numbers	If SA1 is greater than 1500	Each record to be judged on an individual basis. Call-backs may be necessary if number

	of employment	of employees seems excessively high for business activity.
EDIT 5	To check legitimacy of high numbers of vacancies in relation to size of site	If SC6 is more than 5 times greater than SA1 if SA1 < 5 OR if SC6 is more than 3 times greater than SA1 if SA1 IS BETWEEN 5 AND 49 OR if SC6 is more than 1.5 times greater than SA1 if SA1 ≥ 50
EDIT 6	To investigate sites where all employees have been allocated to 1 occupational group	If only 1 of SD5, SD6, SD8_1-7 / SD5C_1-9 is greater than 0 and SA1 is more than 10
EDIT 7	To check high values of individual occupational groups	If SD5 / SD5C_1 (managers) is greater than 50 OR If SD8_7 / SD5C_9 (professionals) is greater than 100 OR If SD8_6 / SD5C_8 (associate

prof/technical) is greater than 100
OR
If SD6 / SD5C_2 (admin/clerical) is greater than 100 OR
If SD8_5 / SD5C_7 (skilled trades) is greater than 100 OR
If SD8_4 / SD5C_6 (caring/leisure) is greater than 100 OR
If SD8_3 / SD5C_5 (sales/customer service) is greater than 100 OR
If SD8_2 / SD5C_4 (machine operatives) is greater than 100 OR
If SD8_1 / SD5C_3 (elementary) is greater than 100

EDIT 8	To check high values of underemployed (both qualifications and skills) staff	If SD15a is greater than half of the sum of SD9 (number of proficient employees) and	Each record to be judged on an individual basis. Call-backs may be necessary.
--------	--	--	---

EDIT 9	To ensure all postcodes given by respondents are valid	If SI4=2	Check that postcode is valid and given in full. Invalid postcodes will need to be investigated as each record must have a full valid postcode in the final data file.
EDIT 10	To check legitimacy of high numbers of work experience placements in relation to size of site	If PC18_1-11 is (combined) more than 5 times greater than SA1 if SA1<5 OR If PC18_1-11 is (combined) more than 2 times greater than SA1 if SA1 IS BETWEEN 5 AND 49 OR If PC18_1-11 is (combined) greater than SA1 if SA1 \geq 50	Each record to be judged on an individual basis. Consider appropriate action if discrepancies are inexplicable. Call-backs may be necessary.
EDIT 11	To check high numbers on particular work experience placements	If any PC18_1-11 value greater than 100	Each record to be judged on an individual basis. Call-backs may be necessary.
EDIT 12	Check legitimate use of the "Head Office" code	If site is a single site (SA3=1) and has used 1 of the various 'Head Office Decision' codes at PC27,	Remove use of the Head Office code if site is a single site. Force to DK if Head Office code only 1 selected.

PD27c, PD34a,
ND39, PD33,
PD34ii, SF15B,
PD27G

EDIT 13	Check instances where respondents declared they have never heard of Developing the Young Workforce – or DYW, but selected it as a code in later questions	IF SPC28=2/3 (No or Don't know) and PC20_10=1 (Approached by a Developing Young Workforce (or DYW) Lead or Regional Group)	Change PC20_10 to 0
		IF SPC28=2/3 (No or Don't know) and PD27C_12=1 (Encouragement / support from a Developing the Young Workforce (DYW) Lead or Regional Group)	Change PD27C_12 to 0

EDIT 14	Edit instances where respondents have mentioned apprenticeships as an 'other' option at PC17.	If coding notes 'apprenticeships' at PC17_h.	Edit response to PC17_h to 'no'. Any subsequent loop responses (PC18, NC19NW, NC20NW, PC19C) should be blanked for that specific loop. If only response was PC17_h = 1 and apprenticeships mentioned then NC21, PC20 and PC27 responses should also be blanked. This should be very rare as interviewers told not to allow 'apprenticeships' at PC17_h.
---------	---	--	---

[Go to top](#)

Annex J: Weighting categories

Table J-1 Most granular region categories used for weighting

Reference	Region
1	East Midlands
2	East of England
3	London
4	North East
5	North West
6	South East
7	South West
8	West Midlands
9	Yorkshire and The Humber
10	Northern Ireland
11	Scotland
12	North Wales
13	Mid Wales
14	South East Wales
15	South West Wales

Table J-2 Most granular size categories used for weighting

Reference	Size
1	2 to 4 employees
2	5 to 9 employees
3	10 to 24 employees
4	25 to 49 employees
5	50 to 99 employees
6	100 to 249 employees
7	250 or more employees

Table J-3 Most granular Sector categories used for weighting

Reference	Sector
1	Primary Sector & Utilities
2	Manufacturing
3	Construction
4	Wholesale & Retail
5	Hotels & Restaurants
6	Transport & Storage
7	Information & Communications
8	Financial Services
9	Business Services
10	Public Administration

11	Education
12	Health and Social Work
13	Arts & Other Services

[Go to top](#)

Annex K: Sampling error and statistical confidence

Sampling errors for the survey results overall and for key sub-groups are presented in Table K-1 below. Figures have been based on a survey result of 50% (the ‘worst’ case in terms of statistical reliability), and have used a 95% confidence level. Where the table indicates that a survey result based on all respondents has a sampling error of $\pm 0.65\%$, this should be interpreted as follows: ‘for a question asked of all respondents where the survey result is 50%, we are 95% confident that the true figure lies within the range 49.35% to 50.65%’. Significance testing on employer measures use the unweighted site or unit base, while employment measures, and density measures such as the proportion of the workforce with skills gaps and skills-shortage vacancy density, have been calculated on the basis of the unweighted employment (or vacancy) base.

As a note, the calculation of sampling error has taken into account the finite population correction factor to account for cases where we are measuring a significant portion of the population (i.e., even if 2 sample sizes are the same, the sampling error will be lower if in 1 case a far higher proportion of the population was covered).

These confidence intervals are based on the assumptions of probability random sampling and a normal distribution of responses.

Table K-1 Sampling error (at the 95% confidence level) associated with findings of 50% (2024)

Survey group	Population	Number of interviews	(Maximum) Sampling Error
Total	1,971,276	22,712	$\pm 0.65\%$

Nation	Population	Number of interviews	(Maximum) Sampling Error
England	1,674,821	8,639	±1.05%
Northern Ireland	61,709	3,388	±1.64%
Scotland	147,947	5,080	±1.35%
Wales	86,799	5,605	±1.27%
Size	Population	Number of interviews	(Maximum) Sampling Error
2 to 4	1,066,643	6,097	±1.25%
5 to 9	404,721	5,282	±1.34%
10 to 24	292,396	5,647	±1.29%
25 to 49	110,703	3,054	±1.75%
50 to 99	54,822	1,602	±2.41%
100 to 249	29,117	844	±3.32%
250 or more	12,874	186	±7.13%
Sector	Population	Number of interviews	(Maximum) Sampling Error
Primary Sector and Utilities	107,965	1,131	±2.90%
Manufacturing	98,526	1,487	±2.52%
Construction	209,582	1,711	±2.36%
Wholesale and retail	365,484	4,440	±1.46%

Hotels and restaurants	196,409	2,333	±2.02%
Transport and storage	63,261	784	±3.48%
Information and communications	84,451	634	±3.88%
Financial services	35,977	393	±4.92%
Business activities	450,492	3,904	±1.56%
Public administration	17,435	251	±6.14%
Education	61,295	1,758	±2.30%
Health and Social Work	133,443	2,417	±1.98%
Arts and Other Services	146,956	1,469	±2.54%

Table K-2 Sampling error (at the 95% confidence level) associated with findings of 50% - Module A (2024)

Survey group	Population	Number of interviews	(Maximum) Sampling Error
Total	1,971,276	5778	±1.29%
Nation	Population	Number of interviews	(Maximum) Sampling Error
England	1,674,821	2,204	±2.09%
Northern Ireland	61,709	868	±3.30%
Scotland	147,947	1,327	±2.68%

Wales	86,799	1,379	±2.62%
Size	Population	Number of interviews	(Maximum) Sampling Error
2 to 4	1,066,643	1,515	±2.52%
5 to 9	404,721	1,334	±2.68%
10 to 24	292,396	1,471	±2.55%
25 to 49	110,703	800	±3.45%
50 to 99	54,822	375	±5.04%
100 to 249	29,117	242	±6.27%
250 or more	12,874	41	±15.28%
Sector	Population	Number of interviews	(Maximum) Sampling Error
Primary Sector and Utilities	107,965	261	±6.06%
Manufacturing	98,526	402	±4.88%
Construction	209,582	439	±4.67%
Wholesale and retail	365,484	1,156	±2.88%
Hotels and restaurants	196,409	573	±4.09%
Transport and storage	63,261	210	±6.75%
Information and communications	84,451	151	±7.97%
Financial services	35,977	89	±10.38%
Business activities	450,492	965	±3.15%

Public administration	17,435	77	±11.14%
Education	61,295	449	±4.61%
Health and Social Work	133,443	631	±3.89%
Arts and Other Services	146,956	375	±5.05%

Table K-3 Sampling error (at the 95% confidence level) associated with findings of 50% - Module B (2024)

Survey group	Population	Number of interviews	(Maximum) Sampling Error
Total	1,971,276	5675	±1.3%
Nation	Population	Number of interviews	(Maximum) Sampling Error
England	1,674,821	2,108	±2.13%
Northern Ireland	61,709	834	±3.37%
Scotland	147,947	1,287	±2.72%
Wales	86,799	1,446	±2.56%
Size	Population	Number of interviews	(Maximum) Sampling Error
2 to 4	1,066,643	1,546	±2.49%
5 to 9	404,721	1,352	±2.66%

10 to 24	292,396	1,386	±2.63%
25 to 49	110,703	752	±3.56%
50 to 99	54,822	410	±4.82%
100 to 249	29,117	185	±7.18%
250 or more	12,874	44	±14.75%

Sector	Population	Number of Interviews	(Maximum Sampling Error)
Primary Sector and Utilities	107,965	309	±5.57%
Manufacturing	98,526	329	±5.39%
Construction	209,582	411	±4.83%
Wholesale and retail	365,484	1,118	±2.93%
Hotels and restaurants	196,409	578	±4.07%
Transport and storage	63,261	181	±7.27%
Information and communications	84,451	166	±7.60%
Financial services	35,977	91	±10.26%
Business activities	450,492	1,006	±3.09%
Public administration	17,435	62	±12.42%
Education	61,295	444	±4.63%
Health and Social Work	133,443	595	±4.01%
Arts and Other Services	146,956	385	±4.99%

Table K-4 Sampling error (at the 95% confidence level) associated with findings of 50% - Module C (2024)

Survey group	Population	Number of	(Maximum) Sampling Error
Total	1,971,276	5564	±1.31%
Nation	Population	Number of	(Maximum) Sampling Error
England	1,674,821	2,156	±2.11%
Northern Ireland	61,709	804	±3.43%
Wales	86,799	1,384	±2.61%
Scotland	147,947	1,220	±2.79%
Size	Population	Number of	(Maximum) Sampling Error
2 to 4	1,066,643	1,482	±2.54%
5 to 9	404,721	1,308	±2.71%
10 to 24	292,396	1,379	±2.63%
25 to 49	110,703	762	±3.54%
50 to 99	54,822	378	±5.02%
100 to 249	29,117	205	±6.82%
250 or more	12,874	50	±13.83%
Sector	Population	Number	(Maximum)

			of	Sampling Error
			interviews	
Primary Sector and Utilities	107,965	271		±5.95%
Manufacturing	98,526	363		±5.13%
Construction	209,582	443		±4.65%
Wholesale and retail	365,484	1,080		±2.98%
Hotels and restaurants	196,409	603		±3.98%
Transport and storage	63,261	197		±6.97%
Information and communications	84,451	143		±8.19%
Financial services	35,977	108		±9.42%
Business activities	450,492	970		±3.14%
Public administration	17,435	51		±13.70%
Education	61,295	421		±4.76%
Health and Social Work	133,443	579		±4.06%
Arts and Other Services	146,956	335		±5.35%

Table K-5 Sampling error (at the 95% confidence level) associated with findings of 50% - Module D (2024)

Survey group	Population	Number of	(Maximum)
			Sampling Error
			interviews
Total	1,971,276	5,695	±1.30%

Nation	Population	Number of interviews	(Maximum) Sampling Error
England	1,674,821	2,171	±2.10%
Northern Ireland	61,709	882	±3.28%
Wales	86,799	1,396	±2.60%
Scotland	147,947	1,246	±2.76%
Size	Population	Number of interviews	(Maximum) Sampling Error
2 to 4	1,066,643	1,554	±2.48%
5 to 9	404,721	1,288	±2.73%
10 to 24	292,396	1,411	±2.60%
25 to 49	110,703	740	±3.59%
50 to 99	54,822	439	±4.66%
100 to 249	29,117	212	±6.71%
250 or more	12,874	51	±13.70%
Sector	Population	Number of interviews	(Maximum) Sampling Error
Primary Sector and Utilities	107,965	290	±5.75%
Manufacturing	98,526	393	±4.93%
Construction	209,582	418	±4.79%
Wholesale and retail	365,484	1,086	±2.97%

Hotels and restaurants	196,409	579	±4.07%
Transport and storage	63,261	196	±6.99%
Information and communications	84,451	174	±7.42%
Financial services	35,977	105	±9.55%
Business activities	450,492	963	±3.15%
Public administration	17,435	61	±12.53%
Education	61,295	444	±4.63%
Health and Social Work	133,443	612	±3.95%
Arts and Other Services	146,956	374	±5.06%

Table K-6 Sampling error (at the 95% confidence level) associated with findings of 50% (2022)

Survey group	Population	Number of interviews	(Maximum) Sampling Error
Total	1,997,712	72,918	± 0.36%
Nation	Population	Number of interviews	(Maximum) Sampling Error
England	1,699,436	59,486	± 0.39%
Northern Ireland	60,351	3,400	± 1.63%
Scotland	149,992	5,207	± 1.33%

Wales	87,933	4,825	± 1.37%
Size	Population	Number of interviews	(Maximum) Sampling Error
2-4	1,090,135	20,671	± 0.68%
5-9	415,707	17,487	± 0.73%
10-24	291,035	17,546	± 0.72%
25-49	107,083	9,403	± 0.97%
50-99	53,204	4,603	± 1.38%
100-249	28,153	2,543	± 1.85%
250+	12,395	665	± 3.70%

Sector	Population	Number of interviews	(Maximum) Sampling Error
Primary Sector and Utilities	109,809	3,210	± 1.70%
Manufacturing	102,452	5,305	± 1.31%
Construction	210,367	5,196	± 1.34%
Wholesale and retail	378,176	15,694	± 0.77%
Hotels and restaurants	196,825	8,087	± 1.07%
Transport and storage	68,093	2,456	± 1.94%
Information and communications	87,449	2,061	± 2.13%
Financial services	37,455	991	± 3.07%
Business activities	454,476	13,036	± 0.85%

Public administration	17,312	656	± 3.75%
Education	60,674	4,654	± 1.38%
Health and Social Work	130,363	7,186	± 1.12%
Arts and Other Services	144,261	4,386	± 1.46%

Table K-7 Sampling error (at the 95% confidence level) associated with findings of 50% - Module A (2022)

Survey group	Population	Number of interviews	(Maximum) Sampling Error
Total	1,997,712	13,603	± 0.84%
Nation	Population	Number of interviews	(Maximum) Sampling Error
England	1,699,436	10,134	± 0.97%
Northern Ireland	60,351	905	± 3.23%
Scotland	149,992	1,325	± 2.68%
Wales	87,933	1,239	± 2.76%
Size	Population	Number of interviews	(Maximum) Sampling Error
2-4	1,090,135	3,772	± 1.59%
5-9	415,707	3,272	± 1.71%

10-24	291,035	3,280	± 1.70%
25-49	107,083	1,792	± 2.30%
50-99	53,204	892	± 3.25%
100-249	28,153	468	± 4.49%
250+	12,395	127	± 8.65%

Sector	Population	Number of interviews	(Maximum Sampling Error)
Primary Sector and Utilities	109,809	618	± 3.93%
Manufacturing	102,452	1,004	± 3.08%
Construction	210,367	934	± 3.20%
Wholesale and retail	378,176	3,024	± 1.77%
Hotels and restaurants	196,825	1,475	± 2.54%
Transport and storage	68,093	440	± 4.66%
Information and communications	87,449	362	± 5.14%
Financial services	37,455	185	± 7.19%
Business activities	454,476	2,379	± 2.00%
Public administration	17,312	135	± 8.40%
Education	60,674	904	± 3.24%
Health and Social Work	130,363	1,353	± 2.65%
Arts and Other Services	144,261	790	± 3.48%

Table K-8 Sampling error (at the 95% confidence level) associated with findings of 50% - Module B (2022)

Survey group	Population	Number of interviews	(Maximum) Sampling Error
Total	1,997,712	13,437	± 0.84%
Nation	Population	Number of interviews	(Maximum) Sampling Error
England	1,699,436	10,038	± 0.98%
Northern Ireland	60,351	809	± 3.42%
Scotland	149,992	1,334	± 2.67%
Wales	87,933	1,256	± 2.75%
Size	Population	Number of interviews	(Maximum) Sampling Error
2-4	1,090,135	3,760	± 1.60%
5-9	415,707	3,256	± 1.71%
10-24	291,035	3,254	± 1.71%
25-49	107,083	1,737	± 2.33%
50-99	53,204	798	± 3.44%
100-249	28,153	499	± 4.35%
250+	12,395	133	± 8.45%
Sector	Population	Number of interviews	(Maximum) Sampling Error

		interviews	Sampling Error
Primary Sector and Utilities	109,809	621	± 3.92%
Manufacturing	102,452	995	± 3.09%
Construction	210,367	910	± 3.24%
Wholesale and retail	378,176	2,879	± 1.82%
Hotels and restaurants	196,825	1,492	± 2.53%
Transport and storage	68,093	445	± 4.63%
Information and communications	87,449	363	± 5.13%
Financial services	37,455	183	± 7.23%
Business activities	454,476	2,360	± 2.01%
Public administration	17,312	127	± 8.66%
Education	60,674	871	± 3.30%
Health and Social Work	130,363	1,372	± 2.63%
Arts and Other Services	144,261	819	± 3.41%

Table K-9 Sampling error (at the 95% confidence level) associated with findings of 50% - Module C (2022)

Survey group	Population	Number of interviews	(Maximum) Sampling Error
Total	1,997,712	13,269	± 0.85%
Nation	Population	Number of	(Maximum)

		interviews	Sampling Error
England	1,699,436	9,906	± 0.98%
Northern Ireland	60,351	863	± 3.31%
Scotland	149,992	1,332	± 2.67%
Wales	87,933	1,168	± 2.85%

Size	Population	Number of	(Maximum)
		interviews	Sampling Error
2-4	1,090,135	3,794	± 1.59%
5-9	415,707	3,168	± 1.73%
10-24	291,035	3,153	± 1.74%
25-49	107,083	1,712	± 2.35%
50-99	53,204	872	± 3.29%
100-249	28,153	438	± 4.65%
250+	12,395	132	± 8.48%

Sector	Population	Number of	(Maximum)
		interviews	Sampling Error
Primary Sector and Utilities	109,809	682	± 3.74%
Manufacturing	102,452	973	± 3.13%
Construction	210,367	953	± 3.17%
Wholesale and retail	378,176	2,787	± 1.85%
Hotels and restaurants	196,825	1,393	± 2.62%

Transport and storage	68,093	462	± 4.54%
Information and communications	87,449	373	± 5.06%
Financial services	37,455	178	± 7.33%
Business activities	454,476	2,373	± 2.01%
Public administration	17,312	119	± 8.95%
Education	60,674	806	± 3.43%
Health and Social Work	130,363	1,357	± 2.65%
Arts and Other Services	144,261	813	± 3.43%

Table K-10 Sampling error (at the 95% confidence level) associated with findings of 50% - Module D (2022)

Survey group	Population	Number of interviews	(Maximum) Sampling Error
Total	1,997,712	13,182	± 0.85%
Nation	Population	Number of interviews	(Maximum) Sampling Error
England	1,699,436	9,994	± 0.98%
Northern Ireland	60,351	822	± 3.39%
Scotland	149,992	1,213	± 2.80%
Wales	87,933	1,153	± 2.87%
Size	Population	Number of	(Maximum)

		interviews	Sampling Error
2-4	1,090,135	3,845	± 1.58%
5-9	415,707	3,143	± 1.74%
10-24	291,035	3,111	± 1.75%
25-49	107,083	1,697	± 2.36%
50-99	53,204	807	± 3.42%
100-249	28,153	467	± 4.50%
250+	12,395	112	± 9.22%

Sector	Population	Number of	(Maximum)
		interviews	Sampling Error
Primary Sector and Utilities	109,809	591	± 4.02%
Manufacturing	102,452	927	± 3.20%
Construction	210,367	966	± 3.15%
Wholesale and retail	378,176	2,852	± 1.83%
Hotels and restaurants	196,825	1,480	± 2.54%
Transport and storage	68,093	447	± 4.62%
Information and communications	87,449	398	± 4.90%
Financial services	37,455	184	± 7.21%
Business activities	454,476	2,308	± 2.03%
Public administration	17,312	125	± 8.73%
Education	60,674	828	± 3.38%

Health and Social Work	130,363	1,297	± 2.71%
Arts and Other Services	144,261	779	± 3.50%

[Go to top](#)

Annex L: Labour Force Survey (LFS) datasets, variables and syntax

Dataset used:

For ESS 2024, the 2023 Quarter 4 dataset was used from the Quarterly Labour Force Surveys. The 2023 dataset uses weight 'PWT24'. For ESS 2022, the 2021 Quarter 4 dataset was used from the Quarterly Labour Force Surveys. The 2021 dataset uses weight 'pwt22'. The fourth quarter dataset is used as this contains all the necessary variables.

A full user guide is available from the [ONS \(opens in new tab\)](#).

Raw variables used:

Inecac05 – Basic economic activity (ILO definition).

Solor – Self-employed with or without employees. This is asked to those who said they were self-employed.

Fptwk - Full time or part time worker. Once only those who are employees or self-employed are selected, this gives the same figures as the other Full/part time variables available in the datasets ('FTPT' and 'FTPTW').

Bushr – Total usual hours worked in main job (excluding overtime).

Dayspz – Number of different days per week worked (1-7). This question is not asked to those who only work on-call working. In 2021 it was not asked to those who work a 9 day fortnight, or a four and a half day week. In 2023, it was not asked to those who work condensed or compressed hours.

Flexw10 (2021) – Whether respondent works on-call working.

Flexw5 (2021) – Whether respondent works a nine-day fortnight.

Flexw6 (2021) – Whether respondent works a four-and-a-half-day week.

Fled10 (2021) – Type of agreed work arrangements.

Fled22 (2023) – Type of agreed working arrangements.

Hols – Number of days of paid holiday entitlement. Applies to all respondents who are employees. Excludes public/bank holidays. All values over 97 treated as don't know/refusal.

Holsb (2021) - For those that do not know their holiday entitlement without public holidays, this question asks for the figure including public holidays. Values higher than 97 should be treated as missing.

Syntax used in 2024:

*Selection of just those who are classed as employees or self-employed with staff.

select if (inecac05=1) or (inecac05=2 and solor=2).

*Filtering of just those who are fulltime workers in their main job.

compute fulltime=\$SYSMIS.

if ftptwk=1 fulltime=1.

if ftptwk>1 fulltime=0.

freq fulltime.

filter by fulltime.

Days worked per week.

weight by PWT24.

means dayspz.

*Unable to work out average days worked per week for those on compressed hours or on-call workers as they were not routed to dayspz. In 2022 the FLED10 codes were 'Four and a half day week' and '9 day fortnight' so days per week were 4.5 on average.

Holiday entitlement per year – hols. User guidance says that values above 97 or

below 0 are invalid. Need to compute a single holiday entitlement variable.

*In 2022 there was a HOLB variable but this doesn't exist anymore so no additional analysis needed to account for this.

compute new_holsa=\$SYSMIS.

if (hols>=0 and hols<98) new_holsa=hols.

*Final figure for number of holidays (excl public holidays) per year.

weight by PWT24.

means new_holsa.

Average hours worked per week - Average hours worked per week. BUSHR should equal the total usual hours excluding overtime for all people.

weight by PWT24.

means bushr.

[Go to top](#)

Help and support

Contact us

If you have a specific enquiry about Employer Skills Survey statistics and data:

Surveys and Research Team

Email: Employer.SURVEYS@education.gov.uk

Contact name: Amy Clay

Press office

If you have a media enquiry:

Telephone: 020 7783 8300

Public enquiries

If you have a general enquiry about the Department for Education (DfE) or education:

Telephone: 037 0000 2288

Opening times:

Monday to Friday from 9.30am to 5pm (excluding bank holidays)

Is this page useful?



[Cookies](#) [Privacy notice](#) [Contact us](#) [Accessibility statement](#) [Glossary](#) [Help and support](#)

This service is maintained by the [Department for Education](#)

Our statistical practice is regulated by the [Office for Statistics Regulation \(OSR\)](#)

OGL

All content is available under the [Open Government Licence v3.0](#), except where otherwise stated

Build: 20251210.11



[© Crown copyright](#)