

Transformed Labour Force Survey background user guide

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Section 1: Background on the transformation of the Labour Force Survey

Purpose of the survey

The Labour Force Survey (LFS) is a survey of households living at private addresses in the UK. Its primary purpose is to provide information on the UK labour market, which can then be used to develop, manage, evaluate and report on labour market policies. The Annual Population Survey (APS) is built using LFS data to create larger datasets to allow more granular analysis at the expense of timeliness. It is typically used for both labour market and demographic analysis.

History of the survey

The first LFS in the UK was conducted in 1973. Initially the survey was conducted every two years. However, over time, as its use by UK government departments increased, the regularity of data capture increased. An annual survey was conducted from 1984, and a quarterly survey was conducted from 1992 in Great Britain and 1994 in Northern Ireland.

Alongside these changes in regularity, the panel design was also developed in the early 1990s. This meant that respondents were then asked some of the same questions for five consecutive quarterly surveys. In addition, new topics such as earnings were introduced.

Extra respondents were included as an annual enhancement to the sample size of the LFS in 2000. Those local boost samples were introduced to improve labour market information at local level. This was further improved in 2004 to create the APS, which brings together all responses to the quarterly LFS collected over the course of a year to create a larger analytical dataset.

Both the current LFS and APS will be replaced by the transformed survey.

The full history and developments of the LFS are available in <u>Volume 1 – LFS background</u> and methodology user guide (PDF, 2.3MB), which is part of the wider <u>Labour Force</u> <u>Survey user guidance</u>.

Development of the transformed survey

In 2014, we published a <u>National Statistics Quality Review of the Labour Force Survey</u> (<u>PDF, 1.21MB</u>) containing some important recommendations to improve the design of the LFS and the quality of its outputs, for example, by:

- introducing online data collection
- exploring the potential of identifying priority areas in the field and allocating resources more flexibly to these areas
- moving to AddressBase as the sampling frame for residential households
- exploring the option of using a rolling reference week rather than a fixed reference week

Following that review, we undertook a transformation programme to address the recommendations. The transformation was initially developed using a prototype survey instrument known as the Labour Market Survey (LMS).

When working to introduce online data collection, research showed that some respondents found the questions difficult to understand. Historically, highly trained and dedicated interviewers have played an essential part in helping respondents apply the questions to their specific circumstances. To account for this, the transformation also focused on a respondent-centred design for the development of survey questions.

We have conducted a series of large-scale quantitative tests, which were mostly onlineonly tests of households sampled from across Great Britain. They focused on survey design factors such as respondent materials, incentives and contact strategies. Reports and findings from these tests are available online:

- <u>Labour Market Survey Response rate experiments Report for Test 1: Materials</u> experiment (PDF, 2.18MB)
- Labour Market Survey Response rate experiments Report for Test 2, Tranche 1: Incentives experiment (PDF, 2.32MB)
- Labour Market Survey: technical report
- Labour Market Survey: comparative estimates report
- Labour Market Survey: characteristics report

In March 2020, we launched the Transformed Labour Force Survey (TLFS) in response to the coronavirus (COVID-19) pandemic This study is known to respondents as the '<u>Shape</u> <u>Tomorrow Study</u>'. At that time, the survey only allowed online response.

In 2021, we conducted a statistical and operational trial to determine the impact of two new approaches to survey response:

- Knock-to-nudge: This approach involves field interviewers knocking on a respondents' door to encourage response if they have not previously answered the survey.
- Telematching: This approach involves obtaining a telephone number for a respondent using a telematching service provided by a third-party organisation then telephone interviewers calling respondents to either encourage response or conduct the interview.

Both new approaches had a positive impact on overall response rates. Additionally, they improved the representativeness of the achieved sample by including proportionately more working age, ethnically diverse and non-UK born respondents. From February 2022, the ability for respondents to answer the survey by telephone was formally provided as an option. In November 2022, knock-to-nudge processes were rolled-out across the whole survey at Wave 1.

Further research, development, monitoring of ongoing progress of the survey, and improvements to the content of the questionnaire have been implemented throughout 2023. A programme of further analysis, developments and improvements is being planned over the course of 2024 and beyond.

Labour market statistics in Northern Ireland

The Northern Ireland Statistics and Research Agency (NISRA) is responsible for the data collection of the LFS in Northern Ireland using its own systems and interviewers. NISRA will continue to collect the existing NISRA LFS to produce Labour Market indicators for

Northern Ireland, then in the second half of 2024 NISRA plans to move to the Northern Ireland Labour Market Survey. This will be broadly similar in design and purpose to the TLFS collected by ONS for Great Britain.

ONS and NISRA have been working closely together to ensure consistency in, and continual delivery of, the UK-wide key labour market indicators throughout the transformational work. This document provides details of the approach used for TLFS across Great Britain, and details about the approach for Northern Ireland will be provided as collaborative work continues.

Section 2: Survey design

Target population

The Transformed Labour Force Survey (TLFS) samples residents of Great Britain in private households. The survey does not currently include communal establishments. One exception to this are students living in halls of residence who are included at their parental address.

Respondents of all ages are eligible to take part, although an adult is asked to answer on behalf of anyone aged 15 years or younger.

Respondents are eligible for the TLFS irrespective of their employment status, including respondents not in employment.

Sampling frame and selection

The sample of addresses is drawn from <u>AddressBase Premium</u>. This address database owned by Ordnance Survey is comprised of local authority data, Royal Mail data and Ordnance Survey data, and is available to the Office for National Statistics under the <u>Public Sector Mapping Agreement</u>.

Addresses are selected using systematic random sampling within each country. The sampling frame is ordered by geography (region, local authority, postcode and Unique Property Reference Number) and addresses are selected at regular intervals. The sampling interval is calculated by dividing the total number of addresses by the required sample size within each country.

This method ensures that a random selection of addresses is sampled from within each country.

The total issued sample within each country was determined by the requirement for a sufficient sample to conduct subnational analysis.

The sample is split and issued across a 13-week data collection period following calendar quarters. Each weekly sample, referred to as a "cohort", is geographically representative.

TLFS Core and TLFS Plus

All households invited to take part in the TLFS will be asked the TLFS Core questions, which are designed to collect socio-demographic data and core labour market data, while half of all households invited will be asked to complete an extended version of the survey referred to as the TLFS Plus. The survey design features a longitudinal element described in the next sub-section. However, it should be noted that only the Core questions are asked in the longitudinal element of the survey.

This design aims to minimise respondent burden and improve data quality by keeping the core questionnaire as short as possible while recognising the data need for the TLFS Plus content. The sample size of TLFS Core maximises the ability to analyse those variables at a granular geographic or characteristic level.

Longitudinal design and wave structure

The TLFS design features a longitudinal element that uses a rotational sampling design, whereby an address, once initially selected for the longitudinal element, is retained in the sample for a total of five consecutive quarters. A proportion of those initially invited to take part in the survey in Wave 1 will be invited to participate in a further four waves. We define Wave 1 as the first quarter an address is selected, Wave 2 as the second quarter an address is selected, and so on. Wave 5 is the last time that an address will be invited to take part in the TLFS.

Therefore, in any given quarter, interviews will be conducted across all five waves. For example, in the January to March 2023 quarter:

- a new cohort of addresses was interviewed for Wave 1
- the cohort of addresses sampled in October to December 2022 were invited for their Wave 2 interview
- the cohort of addresses sampled in July to September 2022 were invited for their Wave 3 interview
- the cohort of addresses sampled in April to June 2022 were invited for their Wave 4 interview
- the cohort of addresses sampled in January to March 2022 were invited for their Wave 5 (final) interview

Of the 140,311 addresses in Wave 1, 40,039 are rotated to Wave 2 and subsequent waves, as represented in Figure 1. These are randomly pre-selected from both TLFS Core and TLFS Plus sampled addresses before Wave 1 data collection begins. A proportional number of cases are selected per country and region and, as they are pre-selected, they contain a mixture of both responding and non-responding addresses. Only 'hard' refusals, addresses that have not responded for two consecutive quarters and ineligible addresses are not rotated to the next wave.

"Hard refusals" are recorded when someone refuses to take part and field staff judge that inviting the household to take part in any further waves could lead to distress or anger. If someone does not wish to take part at that wave but an invitation to take part in future waves is not likely to cause distress or anger, it is recorded as a 'soft refusal' and the case is rotated to the next wave. "Ineligible addresses" refer to addresses that are not eligible to take part in the survey, such as commercial addresses, second homes, communal establishments, or vacant properties.

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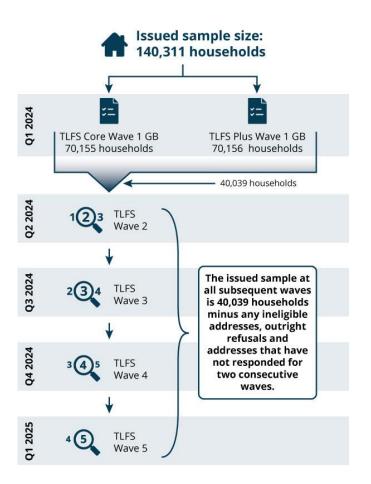


Figure 1: TLFS longitudinal design and wave structure

All addresses at Wave 2 and subsequent waves are issued only the TLFS Core questionnaire, with the same questions asked at every wave. In future, we hope that some questions will only be asked where there has been a change in circumstance since the last wave to reduce respondent burden.

The Wave 1 sample is based on proportional population sizes across Great Britain but includes a boost to the number of issued addresses for Wales and Scotland to meet requirements for more granular country and within-country analysis. The sample for Wave 2+ is based on proportional population size without any further boost.

Tables 1 and 2 provide the issued sample size by country at Wave 1 and Wave 2+ for TLFS Core and TLFS Plus, in terms of number of addresses per quarter.

	Wave 1 issued sample	Wave 2+ issued sample
England	106,673	34,735
Wales	14,574	1,950
Scotland	19,065	3,354
Great Britain	140,311	40,039

Table 1: Issued sample for TLFS Core

Table 2: Issued sample for TLFS Plus

	Wave 1 issued sample
England	53,336
Wales	7,287
Scotland	9,532
Great Britain	70,155

Note:

1. The 70,155 cases are part of the overall 140,311 Wave 1 sample, not an additional sample.

A breakdown of the Wave 1 issued sample by local authority (XLSX, 50.3kB) is available.

Table 3 provides an estimation of the sizes of quarterly and annual datasets for TLFS Core by country based upon achieved numbers of responses to the survey.

Table 3: Estimated number of individuals in quarterly and annual TLFS datasets for TLFS Core variables

	Quarterly All individuals	Quarterly Economically active individuals	Annual All individuals	Annual Economically active individuals
England	112,581	52,286	319,280	154,640
Wales	11,711	5,248	39,336	18,036
Scotland	14,979	7,113	48,916	23,800
Great Britain	139,271	64,647	407,532	196,476

Notes:

1. TLFS quarterly and annual figures are estimated using the July to September 2023 dataset.

2. All figures include complete and partial response.3. All individuals include responders in employment, unemployed (according to International Labour Organisation (ILO)), economically inactive and under 16 years old.

4. Economically active individuals include responders in employment and ILO unemployed.

Rolling reference week

The TLFS uses a "rolling reference week" for Wave 1, which is intended to reduce recall bias and improve respondent recall for key measures. For each sampled address, the reference week is set to the week prior to the date on which the household started the survey. Once the reference week for a household has been set, it remains static; for example, if a household returns to the survey at a later date to enter further information, the reference week remains unchanged.

As the TLFS has a four-week collection period at Wave 1, fixing the reference period to a specific week may have introduced recall bias or increased respondent burden. For example, a household completing in Week 4 that has to recall the number of hours they worked five weeks ago may need to consult documentation or provide an estimate rather than provide an accurate number. By making the reference week the week immediately prior to the interview, it reduces the burden and reduces the effort to recall accurate data.

Once the reference week is set at Wave 1 based on when the household started responding to the survey, reference weeks for subsequent waves are fixed to maintain a fixed 13-week gap between each wave. The fixed reference week for Wave 2 to Wave 5 does not entail the same concerns around respondent burden and recall bias as at Wave 1 because the collection period for Wave 2 to Wave 5 is only two weeks compared to the four-week collection period at Wave 1.

Mode

The TLFS is an online-first, multi-mode survey. Sampled addresses are sent a letter inviting them to take part in the survey. A 12-digit unique access code is provided to enable respondents to take part online. An option to complete via telephone is also available. The questionnaire is available in English or Welsh. A telephone interpretation service is available for those who may not be able to take part in those languages.

Sampled addresses that have not yet completed the survey are sent a reminder letter after 10 days and may also be encouraged to take part via telephone. All sampled addresses are tele-matched by a third-party company that provides mobile or landline telephone numbers for each address where available. Currently, telephone numbers are provided for up to 25% of the sample. Our telephone interviewers then make outbound calls to these addresses asking respondents to take part in a telephone interview.

The Wave 1 data collection period lasts for four weeks. For those who have not responded after two weeks, trained field interviewers may be used to conduct knock-to-nudge visits to sampled addresses to encourage online or telephone response through face-to-face engagement on the doorstep. On these visits, interviewers also capture telephone numbers where possible to enable further follow-up via telephone if needed.

At Waves 2 to 5, the data collection period lasts for 16 days. Engagement at these waves is tailored to the mode of response at the previous wave, with telephone respondents being called from day 3 to encourage response if they haven't already taken part online. Online respondents are sent a letter encouraging online response again, although they may respond via telephone if they prefer. Those who did not respond at the previous wave are sent a tailored invitation letter further emphasising the importance of taking part.

Addresses where the household didn't take part at Wave 1 and no contact was made on the doorstep receive knock-to-nudge visits at Wave 2. As at Wave 1, field interviewers use this form of face-to-face engagement to encourage people to take part, provide access codes if needed and collect telephone numbers. To enable time to make contact and book telephone interviews if needed, knock-to-nudge visits start from day 1 at Wave 2 (when invitation letters land).

No knock-to-nudge visits currently occur at Waves 3, 4 or 5 but knock-to-nudge follow-up is planned to be introduced for Wave 4 from Spring 2024 for all households that didn't take part at Wave 3. As households that don't take part for two consecutive waves are not invited to take part in further waves, everyone at Wave 3 and Wave 5 will either have responded at the previous wave (and therefore be likely to take part again) or will have already received a knock-to-nudge visit at the previous wave, and so further visits at these waves is unlikely to be productive.

Adaptive survey design

Not all non-responding addresses at Wave 1 will receive knock-to-nudge visits. Field interviewer resource will be targeted at addresses in areas in Great Britain with the lowest likelihood of response. This is part of our adaptive survey design which uses information on how people with different demographics (or areas characterised by people with particular demographics) respond differently and adapts the survey design to reduce non-response error in the data produced. By targeting resource at those most under-represented in the data, we can reduce variability in response and reduce bias in the data collected. This is an important component of our drive to improve survey data quality and produce representative estimates.

A "response propensity model" has been developed using previously collected TLFS data to determine the characteristics of geographic areas at Lower Super Output Area (LSOA) level which were least likely to respond to the survey without intervention and to identify where knock-to-nudge visits are likely to be most effective in reducing non-response error.

The model found three variables and sub-categories to be strongly associated with nonresponse. Knock-to-nudge visits at Wave 1 are therefore targeted at areas using information on the following characteristics: where the <u>rural/urban classification</u> is urban, where the average <u>age</u> across an LSOA is under 45 years old, and where the Index of Multiple Deprivation of an LSOA is among the most deprived (deciles 1 to 4). The devolved administrations of Great Britain each publish their own Index of Multiple Deprivation:

- English indices of deprivation
- Welsh Index of Multiple Deprivation
- Scottish Index of Multiple Deprivation

Using this information, LSOAs classified in the following four groups are set as those where Wave 1 knock-to-nudge visits may occur if the household has not already responded to the survey:

- 1. 'urban, most deprived, with an average age of under 45'
- 2. 'urban, least deprived, with an average age of under 45'

- 3. 'non-urban, most deprived, with an average age of under 45'
- 4. 'urban, most deprived, with an average age of 45 or over'

Knock-to-nudge visits at Wave 2 are based on interactions and response at the previous wave and are not targeted based on area characteristics.

Responsive survey design

By implementing a responsive survey design, we can adapt the TLFS collection operation to meet changing needs, drive operational efficiencies and improve data quality. Using detailed timely management information on how the collection operation is performing, interventions can be put in place rapidly to address underperformance in particular areas or population groups or to respond to operational events.

This design will mature over time but is likely to include:

- the ability to increase or decrease interviewer capacity in particular areas
- engagement with community leaders to encourage response
- changes to letters or posting dates, for example to manage the impact of disruption to postal services such as strikes

Item non-response

The TLFS is primarily a self-response survey, which means that while many of the questions in the questionnaire cannot be skipped to reduce the levels of item non-response, respondents may drop out before they have completed the whole survey. As part of our quality assurance process, we monitor non-response for individual questions and analyse paradata on where people drop out of the survey as well as the time it takes for people to complete each question. This information is then used to inform any further research and design work needed to improve respondent experience and drive-up data quality. We also analyse respondent feedback provided on completion of the questionnaire to identify any areas where further improvements may be needed, with the aim of both reducing the proportion of partial responses and item non-response.

Information on imputation, which is a topic linked with item non-response, is available in <u>Section 3</u>.

Section 3: Methodology

Weighting

Weighting survey results

Surveys like the Transformed Labour Force Survey (TLFS) collect information on a sample of the population. To enable us to make inferences from this subset to the entire eligible population we must weight the sample data. This methodological process assigns each responding unit a weight when age and sex information is present along with sufficient questionnaire completion to derive a labour market status. This weight reflects the number of people in the population this case represents. Those responding units failing these criteria are not assigned a weight and removed from final datasets as part of the data cleaning process.

Weighting sample data up to a known population total has several advantages: it ensures that estimates reflect the sample design so that cases with a lower probability of selection will receive a higher weight to compensate. It also compensates for differential non-response among different subgroups in the population, and as such should help guard against potential non-response bias. The use of weights also allows totals, as well as means and proportions, to be estimated easily; and weights may reduce standard errors when the calibration model is included in the variance estimator.

Person basis weighting of TLFS datasets

The Methodology and Quality Directorate conducted extensive testing of attrition and nonresponse biases present in the TLFS quarterly files (at GB level) by comparing the data distributions to known population levels.

Controlling for non-response is limited by a lack of regularly updated population totals for variables related to non-response. However, there was strong evidence that response rates are lower in less affluent areas (places in the lower deciles of the Indices of Multiple Deprivation (IMD)) and among renters (compared to the 2021 Census tenure distribution in England and Wales). To address these biases we included a pre-calibration step at household level adjusting for IMD by region using AddressBase, which can be updated regularly, and tenure using the 2021 Census (currently only England and Wales, we have assumed that the Scotland distribution is the same as for England and Wales and used this as an approximation for GB distribution in the absence of other data). We will continue to review whether this approach remains suitable in future releases.

Other biases were investigated, including country of birth and ethnicity. However, given the lack of regularly updated population totals, and the comparatively low strength of influence these variables had on outputs, it was decided not to include these variables in calibration.

Following preliminary calibration by IMD by region and tenure as a non-response adjustment for Wave 1, for later waves we adjust individual design weights by calculating attrition probabilities by age, tenure, household size, and economic activity status from the previous wave. Previous employment status in TLFS is a significant predictor of attrition even after controlling for other predictors. These wave-specific weights are then combined before final calibration. Final calibration is done by combinations of age groups, sex, local authority, regions and country. We are using the latest <u>2022 mid-year population totals</u> that were published in November 2023.

The two adjustments in the data have different effects. Employed people are most likely to respond to surveys in general, which is supported by results from the Census Non-Response Linkage Study. Thus, the non-response adjustment is likely to reduce employment. This is applied to both the non-response and attrition datasets. However, in the TLFS employed people are more likely to drop out between waves of the survey. Those who are economically inactive are more likely to remain in the survey, even after controlling for age, tenure and household size. Without the addition of attrition with included previous economic status, the quarterly estimate is likely to be biased towards economically inactive people who are more likely to answer in later waves. Therefore, the inclusion of attrition adjustments increases employment compared to weighting just including non-response adjustment.

This method has been supported by fellow ONS experts and external academics and is the current method used for TLFS weighting. Further work is ongoing to refine the method around missing values and variables included in attrition which may lead to changes in future. MQD will be publishing a full paper on this in the coming months, alongside recommendations for timely method review and updating if necessary.

We are also investigating model-based solutions akin to other international Labour Force surveys and making best use of administrative data. This model-based approach would also provide more timely estimates from the TLFS. At present, our Labour Market team only produces national estimates as official statistics each rolling quarter. We are planning on testing state-space and Bayesian hierarchical models to assess if we can produce more breakdowns from the TLFS data (by sex, region, age groups, etc.) and whether we can produce estimates on a monthly basis rather than rolling quarterly in future.

Weighting of other TLFS datasets beyond quarterly person

Work continues to optimise the weighting of TLFS datasets other than the quarterly person file, which includes annual, household, non-proxy and longitudinal weights. In the LFS, these have similar weighting systems to the person quarterly. Refer to <u>Volume 1 – LFS</u> <u>background and methodology user guide (PDF, 2.3MB)</u> for more details on some of the differences. We will take a similar approach in the TLFS, but work will be carried out to ensure the datasets are optimised for their specific purpose and various calibration groups will be tested to ensure an optimal individual solution, and we would weight these datasets to updated population totals.

Imputation

The Labour Force Survey uses a combination of last observation carried forward (LOCF) and nearest neighbour imputation methods across the available person and household-level files. The LOCF method uses the last observed value of an individual to impute that value if the next interview is a non-contact.

A limitation of this method is that it assumes that the last observed value will remain valid at the time of the next (non-responding) interview. LOCF does not acknowledge variance (measurement errors or random fluctuations over time). The method can often inadvertently produce an overly stable picture of the actual economy and might underestimate flows, which is particularly problematic in times of uncertainty for the target variables (such as a cost-of-living crisis).

Carefully conducted data cleaning and editing as part of pre-processing has limited the item-level missingness within the Transformed Labour Force Survey (TLFS) to ensure that all respondents have a derived labour market status that meets international standards. We have removed rolled-forward imputation from the much larger TLFS, in line with approaches taken by Eurostat. The Methodology and Quality Directorate will be investigating whether specific variables might need extra imputation to improve quality.

Work is underway to test donor imputation for productivity hours, which are often variables affected by annual leave, part-time work or seasonal work. Results of testing the imputation method will be going to the <u>Methodological Assurance Review Panel</u> for external quality assurance before being introduced into TLFS production.

We will provide further details on the final approach in an updated version of this user guide once we have tested linking observations across waves.

Seasonal adjustments to the data

Seasonal adjustment aims to estimate and remove effects associated with the time of year a survey is conducted or the arrangement of the calendar, such that underlying movements within a time series may be more easily interpreted. For example, there may be a large increase in economic activity during the summer or around Christmas and by removing these seasonal effects we can better understand the underlying changes in the labour market from one time period to another.

For the seasonal adjustment of LFS estimates, the X11 algorithm methodology is applied through the X13-ARIMA SEAT package. This method uses the iterative application of moving averages to decompose the series into its components (seasonal, trend and irregular). However, due to the symmetric nature of these moving averages, the most recent decomposed values are obtained through forecasting of the original series. The X13-ARIMA SEAT package uses RegARIMA models for forecasting and adjustments for the additive outliers and level shifts. For a reliable seasonal adjustment, the X13-ARIMA SEAT would require a series of length at least five years and one quarter (three months). The Seasonal Adjustment Reviews (SAR) for LFS estimates are carried out annually, taking account of the extra information in the additional data or improvement in the methodology.

The seasonal adjustment of the TLFS series would be carried out after the discontinuity adjustment of LFS and TLFS estimates is underway to test different time series methods. We are planning to apply RegARIMA models for the significant level shift detection in combined LFS and TLFS series. We require at least six consistent TLFS data points (months) to precisely understand the data movement. We are also planning to apply State Space Models to smooth the historic TLFS series after discontinuity adjustments. A review of seasonal adjustment for TLFS series will be repeated 12 months later.

Section 4: Quality

A larger sample size with more representative data is fundamental to delivering outputs with a higher degree of precision and producing estimates at a more granular geographic level.

To increase the quality of the data, the collection operation focuses on three areas in priority order:

- 1. Reduce bias: by reducing variability in response across geographic areas and across other area classifications such as Index of Multiple Deprivation and Output Area Classifications.
- 2. Reduce attrition: by retaining respondents from Wave 1 through to Wave 5 and reducing the level of bias across each wave.
- 3. Improve response: by increasing overall response rates and achieving a minimum level of response in each local authority and region.

In addition, we compare the proportional make-up of respondent characteristics (age, sex, disability, country of birth, tenure, ethnicity, occupation, industry) with best available estimates of the overall population to identify any under-represented groups and to enable us to target interventions towards those groups where possible.

By manipulating the design of the collection operation to drive up the quality of the data collected through our adaptive and responsive survey design, the Transformed Labour Force Survey will better enable the production of higher quality, more granular estimates that meet user needs.

Section 5: Dissemination of data

We will release a range of Transformed Labour Force Survey (TLFS) datasets that are used in published analyses, notably the <u>Labour market overview</u>, based on the analytical needs of our users. We will do so using a range of mediums depending on the type of users.

We are currently developing the production of the following TLFS microdata, which will be replacing all current Labour Force Survey (LFS) and Annual Population Survey (APS) datasets:

- Calendar-quarter cross-sectional person basis
- Calendar-quarter cross-sectional household basis
- Two-quarter (2Q) longitudinal person basis
- Two-quarter (2Q) longitudinal household basis
- Five-quarter (5Q) longitudinal person basis
- Annual cross-sectional person basis
- Annual cross-sectional household basis

These datasets remain under development, and we continue engaging with colleagues working on the Northern Ireland Labour Market Survey to assess what content UK-wide TLFS files will contain.

We will assess the need for pooled datasets covering wider time spans as the volume of TLFS data increases.

Government departments

Government departments will continue to receive identifiable microdata every calendar quarter with their access approvals and specifications governed through our Data Access team. Microdata will be made available in CSV format (including both a data file and a metadata file). This can then be converted into a format of the user's choice such as SPSS, SAS, STATA, R and Python. Datasets are delivered to government departments to an agreed set of contacts via the secure MOVEit file transfer system, on each corresponding Labour Market release day.

Nomis

As part of our regular Labour market overview release, tabulations of data are made available through the <u>National On-line Manpower Information System (Nomis)</u>. Users can specify variables to download more detailed, bespoke analysis from publicly available data files based upon their selections. These data are available to anybody without registration or any special access agreements.

Secure Research Service (SRS)

The SRS receives identifiable microdata files quarterly containing largely the same information and versions that are delivered to government departments. Approved researchers can access the data through project applications to conduct detailed analysis. <u>More information about the SRS</u> including how to access the data is available.

In due course, the SRS may be replaced by the <u>Integrated Data Service (IDS)</u>, which is a new cross-government service aiming to build on the success of the SRS. We are working with both the SRS and IDS teams to ensure LFS, APS and TLFS data are available through both platforms wherever possible.

UK Data Service (UKDS)

The <u>UKDS</u> receive non-identifiable "End User Licence" microdata on a quarterly basis. These microdata are recoded for certain identifiable variables to a more aggregated level (for example, marital status and country of birth), and their specification contains a reduced list of variables compared to the SRS version. Microdata are delivered via the secure MOVEit file transfer system on each corresponding Labour Market release day.