Office for National Statistics

Article

Labour market transformation – update on progress and plans: September 2022

Latest update on our labour market statistics transformation journey.

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1 . Overview

This article provides an overview of the transformation of labour market statistics and our plans over the next few years. It explains what we mean by labour market statistics and why they are so important, and describes the opportunity presented by modern collection methods including the use of online surveys and administrative data.

We also describe our plans and approach to improve labour market statistics based on a transformed Labour Force Survey and through greater use of administrative data.

This article includes feedback from the user engagement exercise and is part of our ongoing commitment to engage users in the transformation of labour market statistics. We welcome your feedback on our latest update and plans, please email labour.market.transformation@ons.gov.uk to tell us what you think.

You can also find an accompanying summary of previous updates we have shared about transforming the Labour Force Survey.

2 . What are labour market statistics and why they are so important

Labour market statistics provide important insights into the UK economy. They measure many different aspects of work and jobs. They include statistics on people who are employed, as well as those defined as unemployed or economically inactive. They also include statistics on employers and businesses.

The statistics produced by the Office for National Statistics (ONS) are a trusted source and help inform decisions that affect the lives of everyone in the UK. For example, they are used for social analysis and help inform a range of government policies towards population groups of particular concern: women, young people, older people and workless households.

Most labour market statistics are collected using surveys completed by households and businesses. Some administrative data are also used.

Different areas included within labour market statistics and data sources used

Employment

- Labour Force Survey: household survey

- Experimental HM Revenue and Customs Pay As You Earn payrolled employees: administrative data

Public sector employment

- Quarterly Public Sector Employment Survey: business survey

- Business Register and Employment Survey: business survey

- Annual Population Survey: household survey

- Labour Force Survey: household survey

Jobs

- Short-Term Employment Survey: business survey

- Quarterly Public Sector Employment Survey: business survey

- Business Register and Employment Survey: business survey

- Labour Force Survey: household survey

- Pay As You Earn Real Time Information: administrative data

Unemployment

- Labour Force Survey: household survey

- Claimant Count: administrative data

- Labour Force Survey: household survey

- Insolvency Service HR1 data: administrative data

Earnings

- Annual Survey of Hours and Earnings: business survey

- Labour Force Survey: household survey

- Pay As You Earn Real Time Information: administrative data

Vacancies

- Vacancy Survey: business survey

The ONS produces a suite of labour market statistics each month as well as quarterly and annual publications on specific areas such as workless households and earnings. For more detail on what they include please read our summary guide [A guide to labour market data – Office for National Statistics (ons.gov.uk)](ons.gov.uk) .

3 . Why we are transforming labour market statistics

It is our mission to provide the most accurate and up-to-date statistics about the UK labour market. We have achieved this through continued development and innovation, and we are now planning further improvements to labour market statistics to improve quality, granularity and timeliness.

Using surveys to collect labour market statistics is an effective and proven approach that delivers trusted and comparable results. Our surveys are detailed and cover a wide range of topics, opinions and data, which provide essential information that is not available from administrative data.

Two of our main transformation initiatives we are now undertaking are:

- the transformation of the Labour Force Survey (LFS)

- the wider adoption of administrative data sources such as HM Revenue and Customs (HMRC) Pay As You Earn Real Time Information (PAYE RTI) and self-assessment data

As outlined in our earlier blog on transforming the Labour Force Survey, we are currently making improvements to the LFS such as:

- improving the methods for collecting the data

- increasing the sample size

- moving to an online first approach to data collection, supported by telephone collection and "knock to nudge" processes to ensure we are reaching the widest possible pool of people to further improve and give the most accurate picture of the UK's labour market

Further information on the latest position of the transformed LFS can be found in Section 4: Our transformation journey.

The goal of these initiatives is to reduce the time and effort needed to collect survey data, to improve overall response rates and to provide more accurate and relevant statistics. The combined aim is to provide greater insight into the UK labour market and to better inform decision-making at both a national and local level.

4 . Our transformation journey

This section describes what we have done so far to transform the Labour Force Survey (LFS) and to make greater use of administrative data in our labour market statistics.

Transforming the Labour Force Survey

Over the last few years, the Office for National Statistics (ONS) has been developing a transformed version of the LFS using an online-first multi-mode collection approach. A number of successful tests and pilots using online data collection were carried out, including a full-scale data collection in 2018 and 2019, leading to the first iteration of the online survey going live from March 2020. Further information on earlier research and results can be found in the Labour Market Survey: research and results overview. This timeline was slightly accelerated by the coronavirus (COVID-19) pandemic when face-to-face interviewing on the LFS was not taking place.

With recent developments, including the addition of the ability to respond to the transformed survey by telephone, the ONS is now able to begin planning the move towards incorporating the transformed LFS data into the regular labour market data releases from autumn 2023. Further changes to the survey will be considered after autumn 2023. This will include the use of administrative data as well as other changes not within scope of the current project.

The use of online first, followed by telephone and knock to nudge provides a number of long-term benefits:

- a larger and more representative achieved sample leading to better quality headline statistics and ability to further improve granularity

- improved response rates through the larger sample using an adaptive and response design for data collection

- improved timeliness and frequency aiming to produce monthly estimates of labour market data

- more robust and detailed data on characteristics of interest, such as disability and ethnicity

- the new survey design aims to become more flexible making it easier to respond to the changing needs of the day, with the ability to insert new questions and remove ones that are no longer relevant quickly and safely

- the survey has been designed around respondents, making it easier for them to complete

However, to move the survey to online first has meant a significant change to the survey structure and the questions asked. Therefore, although the survey is designed to produce the same aggregate statistics, the finer details of the survey will change.

In addition to making changes to survey and modes of collection, we are looking at a range of methods to support more timely and sustainable statistics. Traditionally we have used weighting and calibration methods that consider the sample design and current population totals to give accurate estimates of labour market statistics. Our time series have been based on rolling quarters of data, which provide enough data for the estimation methods to be robust.

We would like to produce timelier statistics that will allow users to see month-on-month differences alongside longer-term trends. To provide accuracy at this frequency we need to consider model-based estimation methods. We are currently exploring a range of models and will be comparing them with traditional design-based methods in order to select the best quality estimates for the transformed LFS.

Model-based estimates can look different to design-based estimates, and while very useful in terms of providing accurate estimates for smaller domains (sub-national statistics, population groups, timepoints), they do not necessarily result in a person-level weight that can be used in the same way as the weighting methods. Therefore, there will be trade-offs when selecting the final methods to take forward. We will share the progress and results of this work as it progresses, see Section 6: What happens next for more information.

Given the scale and complexity of this transformation, there will be impacts upon the detailed variables available in the microdata some analysts make use of, and there may also be changes to data at the published aggregate level. More information on the survey design and what this means for our users can be found in the blog on transforming the Labour Force Survey. We conducted a user engagement exercise to better understand the impact such changes would have upon users; the findings from this are summarised in Section 5: What users have told us.

As we work through the developments to the survey over the coming months, we will continue to update users on progress, timelines and more details about the design. We are committed to publishing a transformation update such as this each quarter, with the next scheduled toward the end of 2022. Further information on what else users can expect is provided in Section 6: What happens next.

Timeline for the transformation of the Labour Force Survey

- February 2022: telephone mode introduced

- April 2022: increase in sample size to 142,000 households per quarter

- September 2022: additional questions added

- November 2022: "knock to nudge" field mode and responsive design go live

- March 2023: decision point – if statistical quality criteria achieved, transformed LFS becomes the primary survey for data collection

- June 2023: current LFS decommissioned

- September 2023: first of regular labour market releases published using transformed LFS as the primary survey data source

The full transition will take until September 2023, at which point results from the transformed LFS will become the primary source for regular labour market releases. The estimates in the September 2023 labour market publications will cover the three-month period May to July 2023 alongside the single month estimates for July, using the transformed LFS survey data. The estimates in the November 2023 labour market publications will cover the three-month period July to September.

When labour market releases will first use data from the transformed Labour Force Survey

Employment and labour market

- [Labour market overview, employment in the UK](#) (monthly): September 2023

- [Labour market in the regions of the UK](#) (monthly): September 2023

- [Labour Force Survey flow estimates](#) (quarterly): November 2023

- [Vacancies and jobs in the UK](#) (quarterly): September 2023

- [Young people not in education, employment or training (NEET), UK](#) (quarterly): November 2023

- [Working and workless households in the UK](#) (quarterly): December 2023

- [Workless households by regions across UK](#) (annual): July 2024

- [Children living in long-term workless households](#) (annual): October 2024

Labour productivity

- [Labour productivity flash estimates](#) (quarterly): November 2023

- [Productivity overview, UK](#) (quarterly): January 2024

- [International comparisons of UK productivity (ICP)](#) (annual): January 2024

- [Labour costs and labour share](#) (quarterly): February 2024

- [Quarterly regional labour productivity](#) (quarterly): February 2024

- [Annual regional labour productivity](#) (annual): March 2024

- [Subregional productivity](#) (annual): March 2024

Release dates are currently estimated. Exact publication dates will be confirmed closer to the time, although they are not expected to be brought forward prior to September 2023.

The use of administrative data in the labour market

We currently use some administrative data in the production of labour market, for example, HM Revenue and Customs Pay As You Earn Real Time Information (PAYE RTI) is used for a joint HMRC and ONS experimental statistics publication: [Earnings and employment from Pay As You Earn Real Time Information, UK](#).

The dataset provides the opportunity to make comparisons with statistics published and to [improve the population weights used in the estimation of the labour market](#).

The publication [Comparison of labour market data sources](#) provides a useful overview and provides a comparison of how labour market administrative data compares with survey data.

We are planning to make greater use of PAYE RTI data in the future. For example, we hope to provide improved statistics for the provision of data on salaries paid by smaller businesses, to provide a more granular breakdown by industry and to investigate the potential to improve the regional estimates currently produced. Other opportunities we are looking at are using PAYE RTI as a replacement to short-term employment surveys, used to measure employee jobs in Workforce Jobs, and developing data to feed into estimates of household income.

The project has started by identifying opportunities for using PAYE RTI data in labour market statistics. We will be researching opportunities across earnings, demand, supply, households and productivity. For more information on different measures of labour market statistics see [Comparison of labour market data sources](#).

High-level timeline for the PAYE RTI project

Research

August to December 2022: To identify opportunities for improving labour market statistics and will inform the plan for delivery.

Discovery

January 2022 to July 2024: To determine how each set of opportunities will be delivered – will be ongoing and will support the different releases during the delivery phase.

Delivery

May 2023 to March 2025: Expected to be incremental and be made up of several releases for the different areas of supply, demand, earnings, household and productivity.

Please be aware that because the project is in its infancy the dates are indicative and may change; we will be able to provide more information on findings through the research phase and how these are shaping our plans in future updates.

5 . What users have told us

We understand that changes to our surveys can have an impact on our users, and user feedback plays an essential part in the transformation of Office for National Statistics (ONS) statistics.

To provide opportunities for such feedback, in recent months we have engaged in a number of activities with users in relation to the transformation of the Labour Force Survey (LFS). Activities have included presentations at the Labour Force and Annual Population Survey (APS) User Conference, at the LFS Steering Group and at various user groups, a user engagement exercise run between March and June, and outreach activities to individual users on business change.

What we learnt from the user engagement exercise

As part of the transformation of the LFS, we ran a user engagement exercise. It was an online questionnaire hosted on an ONS platform with a Word version available, open for users to respond to from 29 March 2022 to 29 June 2022. It was released as part of a package of information about transforming the LFS, publicised via an ONS National Statistical blog on transforming the Labour Force Survey and via social media.

This exercise gave users the opportunity to tell us how they will be impacted by the transformation, to better understand those impacts and what the ONS can do to support users through the change. We would like to thank everybody who responded to this exercise.

Users were asked to respond to questions about:

- the sources of labour market information used

- the impact the transition to the new LFS will have on their work

- whether programs or processing systems used to analyse LFS or APS data are likely to be affected by this change

- what the Labour market transformation project can do to help users mitigate any impacts

- what information users would like to see published before the transition takes place

Here we provide a summary of the information that users provided, reflecting the opinions of those users who engaged with this feedback exercise.

We received plenty of positive feedback from users about our plans to transform the LFS, and the potential to see further improvements to data quality, robustness and reliability of labour market estimates were welcomed.

We were able to build a better picture of what users would like to better understand about what is changing and how this may impact the way they use LFS data. This has provided us with some valuable information to incorporate into our plans and work more closely to support users through the transition.

We received responses from a cross-section of sectors including central government departments, devolved administrations, local government, academia, think tanks, charities and a few users who did not specify their affiliation. Nearly all respondents answered in a professional capacity on behalf of their organisation.

Almost all that responded use LFS microdata (person-based, quarterly) and most use the APS datasets (person-based, annual or three-year). More than half use the LFS longitudinal datasets (two-quarter or five-quarter). Fewer than half use the household-based LFS datasets and household-based APS datasets. Three respondents mentioned using the APS longitudinal datasets.

Respondents use LFS and APS data for research, to produce bespoke analysis for policy purposes, for published articles, data tables and writing briefings.

Overall, there was positive feedback and support for the timely development of the LFS. Broadly the feedback can be summarised as:

- more timely data will allow for more up-to-date, detailed and bespoke analysis

- in the long run, the changes should reduce attrition and improve data quality, robustness and reliability

- improved accuracy will provide greater confidence in the statistics produced

- increased sample size might offer new opportunities to generate more meaningful analysis

- approach to put respondents first is welcome

Potential impact highlighted through the engagement exercise

An important purpose of asking users to respond to the questionnaire was to obtain information on the potential impact of changes. Nearly all respondents asked for further information about variables and questionnaire content to fully assess impact. Without this information, many said they were unable to fully assess the impact of changes.

In the absence of this detail, users set out the potential areas of concern:

- comparability and consistency of variables and questions (definitions, wording, availability) between the current and new survey was the impact that was most mentioned; some users provided examples of the work and research that they would not be able to replicate if this were the case

- accessibility considerations for diverse communication needs was raised along with concerns about the impact of a move to online-first mode on the digitally excluded unless steps are put in place to ensure that they are captured proportionately

- the risk of potential biases from the change of methods

- there was uncertainty around the modular design of the survey, the positioning and frequency of certain questions in comparison with the current survey

There were questions about how much bigger the transformed LFS sample size is expected to be compared with the current LFS achieved sample and whether a boost sample for the APS will still be required. There were also questions about the target response rate and the proportion of responses expected from proxy respondents.

Regarding the impact on processing systems to analyse LFS and APS data, some flagged the possible need for system updates and changes (such as incorporating new variables and variable changes, updating codes, using new programming languages). The potential cost and time investment that may be required to implement such changes and impact on team resources was also raised.

Business change engagements

In addition to presentations and the user engagement exercise, we have engaged with teams and departments on a bilateral basis to delve into more detail to better assess the impact our transformation will have.

As we continue to reach out to users, we ask about the type and scale of impact the transformation is likely to have upon analytical and production processes, potential changes needed to technologies and systems, and the lead time necessary to make such changes. With this information, we are building our approach to business change, and ensuring we provide information and support in sufficient time to enable users to adopt the newly transformed survey and its outputs into their systems for onward analysis. These engagements will continue throughout the transformation, involving an increasing number and variety of users as capacity allows, moving from understanding the impact to supporting users through the change.

Bilateral engagements with important users indicate that there should be limited impact upon analytical capability and production as a result of transforming the LFS, on the assumption sufficient information is given to users and with sufficient lead time for them to implement any changes. We continue to build our approach to business change including release of user guidance materials and giving presentations at user events.

6 . What happens next

Between October and December 2022, we will share the following information with users:

- further detail on the content of the transformed Labour Force Survey (LFS) questionnaire including mapping from the current to the transformed content

- a more detailed overview of the survey design and methodology

- a dummy dataset to enable users to see the format and layout of datasets expected to be produced from the transformed survey

- an article on different options being explored for improved methodology

This information will initially be shared by email with stakeholders for whom we hold contact details and have engaged with previously on the transformation of the LFS followed by publication on the ONS website. If you would like to be included, please let us know by emailing us at Labour.market.transformation@ons.gov.uk

Alongside this detailed information, we are committed to sharing an updated Labour market transformation article quarterly. The next update is expected to be December 2022. As development and analysis progresses on the transformed LFS, in early 2023 we will publish information comparing the results of the different methods used as well as some early insights on the analysis and evaluation of data. Later in 2023 we will publish additional information such as how we are addressing discontinuities. We will provide more detailed timelines for these outputs in our next transformation update. We will also continue to engage with our users through other means such as bilateral conversations, user engagement groups and conferences.

7 . Cite this article

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