

Update on the Transformed Labour Force Survey

James Harris james.p.harris@ons.gov.uk
at UKDS Annual LFS/APS User Conference 2023
2 Feb 2023

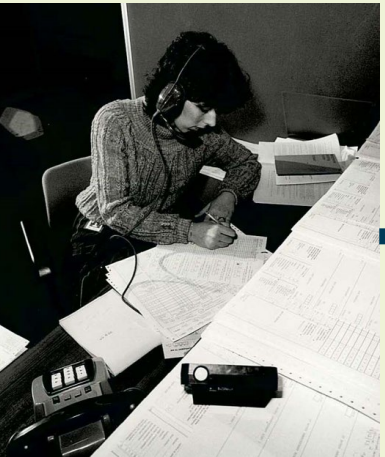


Celebrating 50 years of the LFS



In the 50th year since the Labour Force Survey started collecting statistics on the labour market, demographics, and the various aspects of people's every day lives, the survey continues to evolve through transformation bringing us fully into the digital age

	HOH (1)	(2)	(3)	(4)
FOR PERSONS BORN 1960 OR LATER RING CODE S OPPOSITE AND END INTERVIEW.....	S	S	S	S
6.What is (___) USUAL SITUATION as regards employment: Are you/Is (___)				
<i>PROMPT AS NECESSARY</i> In paid employment, or self employed.....	1	1	1	1
Unemployed actively seeking work...	3	3	3	3
A full time student.....	4	4	4	4
Retired, pensioned (include permanently sick and disabled)....	6	6	6	6
A Housewife (IF NONE OF ABOVE)....	7	7	7	7
Other?..... (SPECIFY)→	8	8	8	8



Office for National Statistics

Shape Tomorrow

[Previous](#)

Please enter your details

Person 1

My First or Given Name

My Middle Names

My Surname or Family Name

My Sex

Male

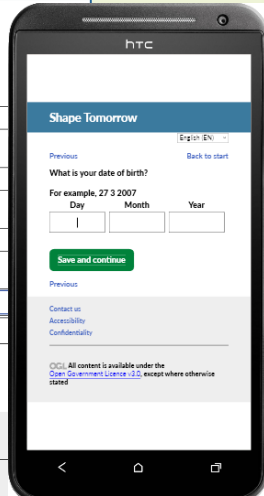
Female

[Save and continue](#)

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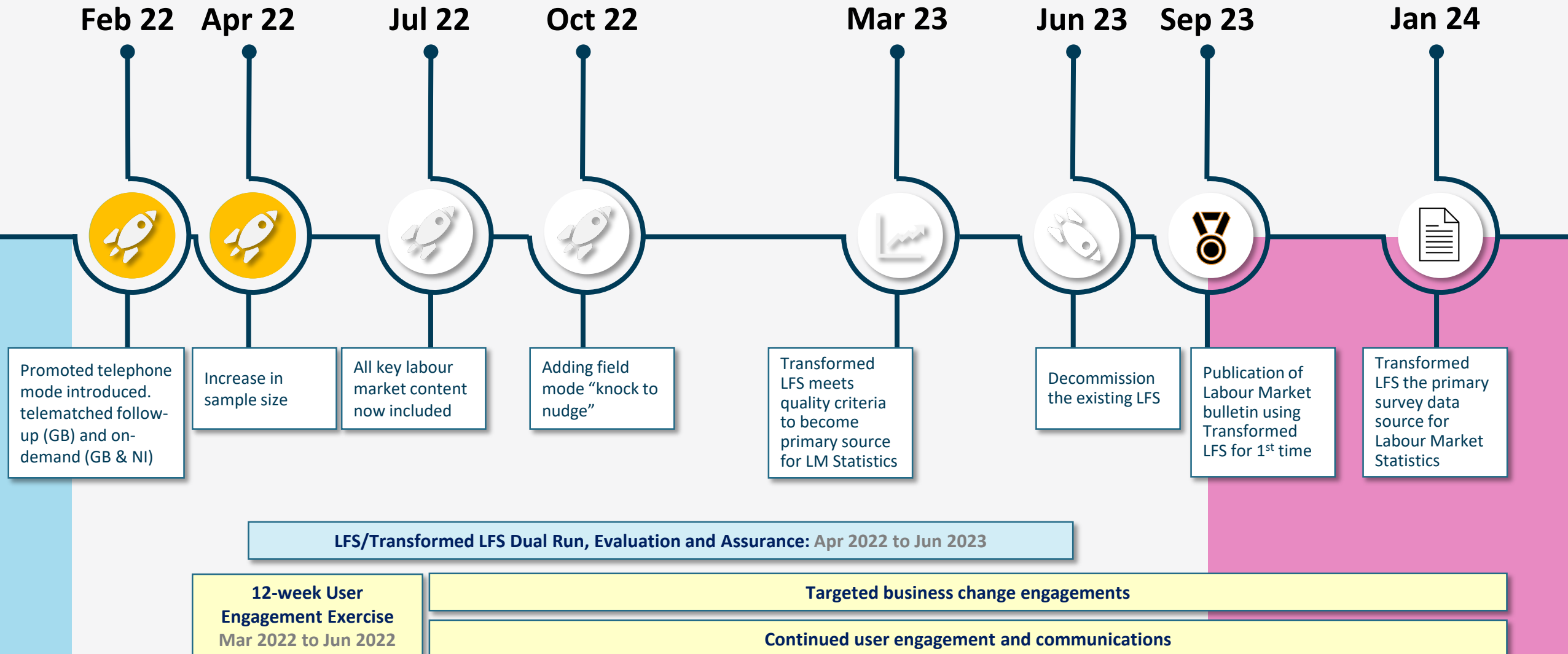
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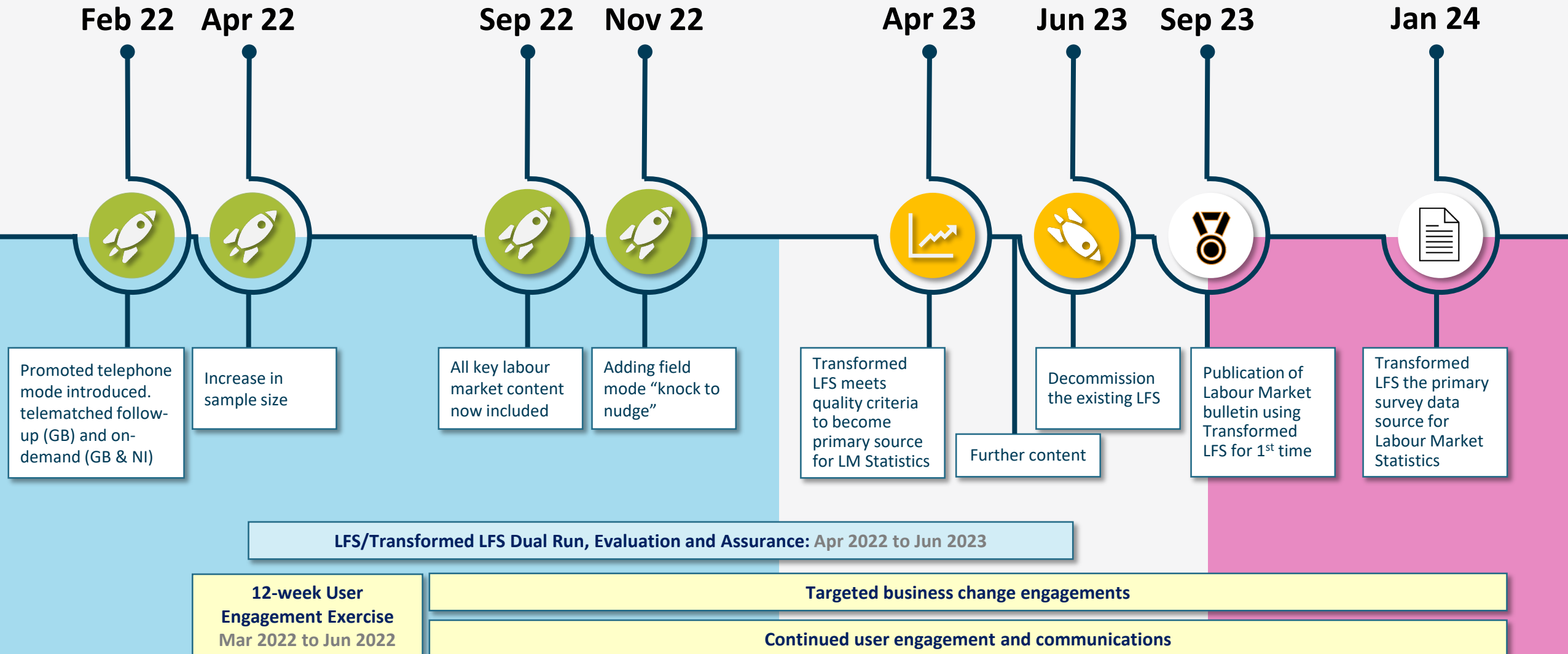
Timeline for the transformation

Last time I was here...



Timeline for the transformation

Currently...



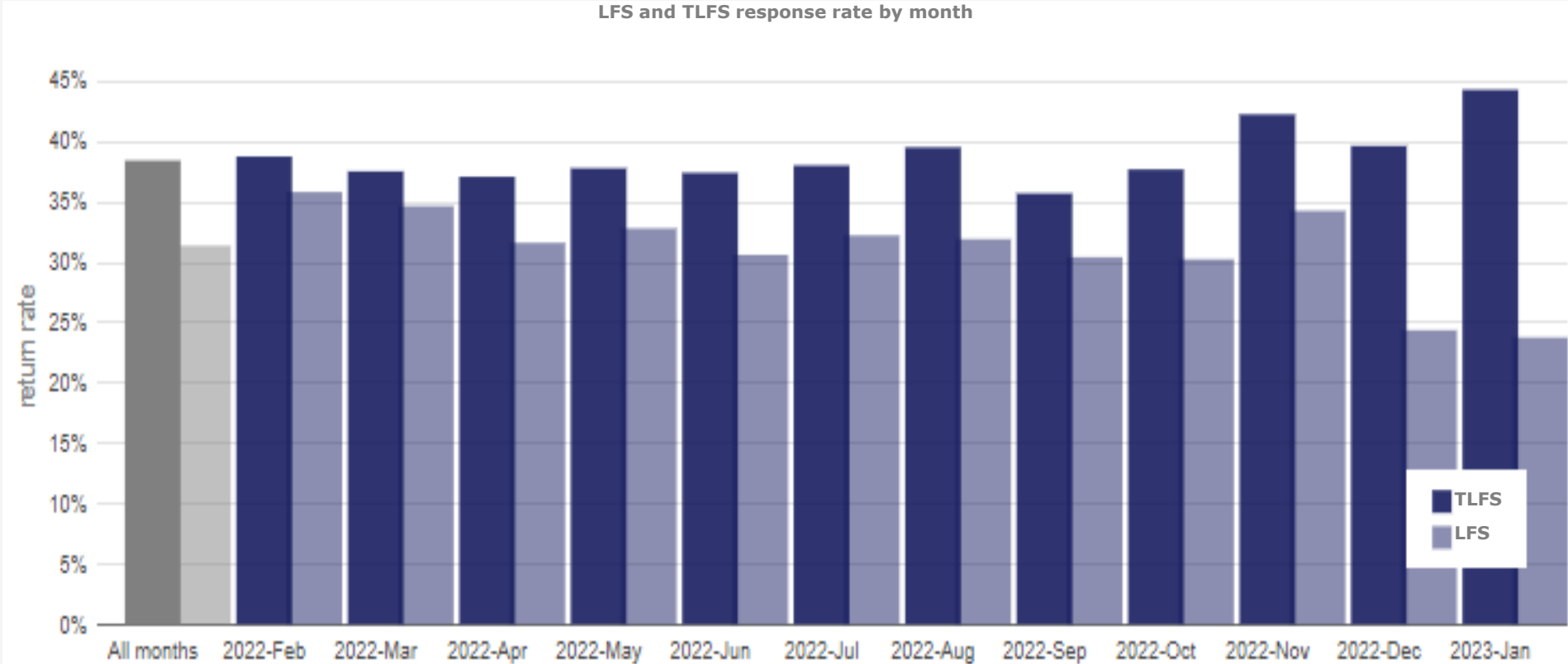
Progress in recent months

- Increased sample size to target levels
- Inclusion of all key labour market content
- Further development of additional content
- Addition of the final (field) mode of data collection
- Monitoring and adjustments to current performance
- Analysis and investigation of current results and outputs
- Further methodological development



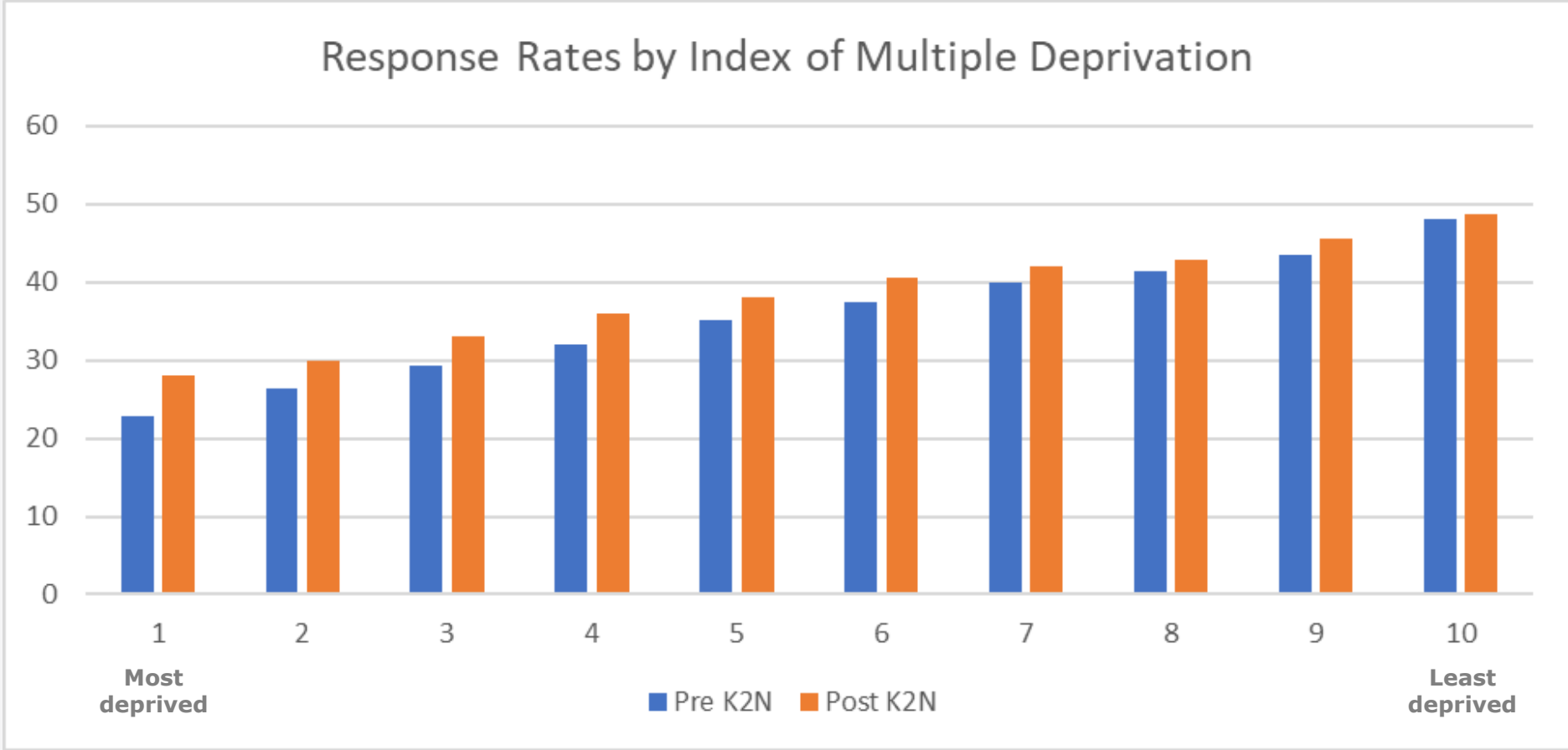
Developing performance: response rate

Wave 1 only, with modes combined where possible



Developing performance: IMD-based bias

Wave 1 only, with modes combined where possible



First release of TLFS user guidance



Published user guidance material

Published [first version of user guidance material](#) to provide information about the transformed survey design, methodology and content as at Oct 2022

Includes three items:



Background document covering methodological detail



Sample “dummy” dataset to see the architecture of TLFS outputs



Mapping document showing changes in variables

Background document

- Contains the key background and methodological information about the survey design and how to use it
- Presents design situation (as at Oct 2022), to be updated in Spring as methodological design is completed
- Much-simplified version of former LFS documentation to make it easier to digest and understand

Transformed Labour Survey – Background user guide

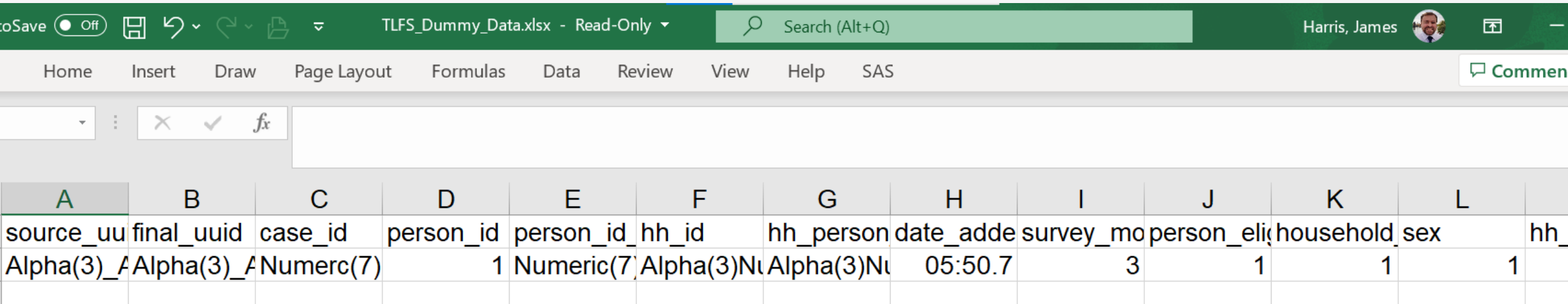
14 November 2022

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Dummy dataset

- Created so users can see the design, shape and variable definitions of the file (the 'architecture') they can expect to see in the Transformed microdata
- Contains all the current variables and either the definition of the variable (eg Alpha(3)Numeric(7)) or example response for that variable (eg sex = 1)
- Contains no actual data, only one example response, to test with systems



The screenshot shows the Microsoft Excel interface with a dummy dataset. The title bar indicates the file is 'TLFS_Dummy_Data.xlsx - Read-Only'. The ribbon includes 'Home', 'Insert', 'Draw', 'Page Layout', 'Formulas', 'Data', 'Review', 'View', 'Help', and 'SAS'. The data is presented in a table with columns A through L. The first row contains variable names and their definitions, while the second row contains example values for each variable.

A	B	C	D	E	F	G	H	I	J	K	L	
source_uu	final_uuid	case_id	person_id	person_id	hh_id	hh_person	date_adde	survey_mo	person_elig	household	sex	hh_
Alpha(3)_A	Alpha(3)_A	Numeric(7)	1	Numeric(7)	Alpha(3)Nu	Alpha(3)Nu	05:50.7	3	1	1	1	

Variable mapping file

- Excel file “Transformed TLFS to LFS Mapping Document”
- Contains all the regular variables contained in the current design (at Oct 22)
- Does not contain Derived Variables (yet)
- Here is an example...

Content of the Transformed Labour Force Survey: labour market				Match	Content of the Labour Force Survey: labour market		
Core & Plus or Plus only	Variable Name	Variable Description	Response Value		Variable Name	Variable Description	Response Options
Core & Plus	not_look_work_reason	What was the main reason you did not look for work in this period?	1. Retired from paid work 2. Studying 3. Looking after the family or home 4. Childcare is too expensive 5. Caring responsibilities for adults 6. Illness or disability expecting to last for 4 weeks or longer 7. Illness or injury expected to last fewer than 4 weeks 8. Waiting to start a job I have accepted 9. Waiting for the results of a job application 10. No suitable jobs were available 11. Not yet started looking 12. Did not need employment 13. Other Missing	Additional response options in TLFS make some comparison possible, but not exact comparison. The additional response options are: <ul style="list-style-type: none"> • Childcare too expensive • Caring responsibilities for adults • Waiting to start an accepted job and • Missing 	NOLWM	May I just check, what was the main reason you did not look for work (in the last 4 weeks)	1 Waiting for the results of an application for a job/being assessed by a training agent 2 Student 3 Looking after the family/home 4 Temporarily sick or injured 5 Long-term sick or disabled 6 Believe(s) no jobs available 7 Not yet started looking 8 Do(does) not need employment 9 Retired from paid work 10 Any other reason

Ongoing development



Adapting the Survey Design

- Current data collection strategy is the same for all addresses:
 - Addresses are sampled using a Systematic Random Sample from a system called AddressBase
 - For up to five successive quarters, each address is sent an invitation to take part in the survey
 - Following the invitation, people are encouraged to respond by telephone or “knock-to-nudge” (mixed mode)
 - Carried out through 13 geographically representative weekly ‘cohorts’
- The response rate indicates what proportion of people invited to take part responded, but there is an unequal distribution of responses, a ‘differential non-response bias’; the responding sample **was** more biased towards *white, male, home-owners, aged 45+*
- Statistical processing enables weighting of the sample to account for some bias, but confidence in estimates will only improve with higher quality input data

Quality targets of the survey

Reducing Bias

- Reduce variability in response across geographic areas and across other area classifications such as Index of Multiple Deprivation and Output Area Classifications and improve representativity by personal characteristics (eg age, sex, ethnicity)

Reducing Attrition

- Retain respondents through to Wave 5 and reduce the level of bias across each wave

Improving Response

- Increase overall response rates and achieve a minimum level of response in each local authority and region

How do we adapt the survey toward meeting these targets?

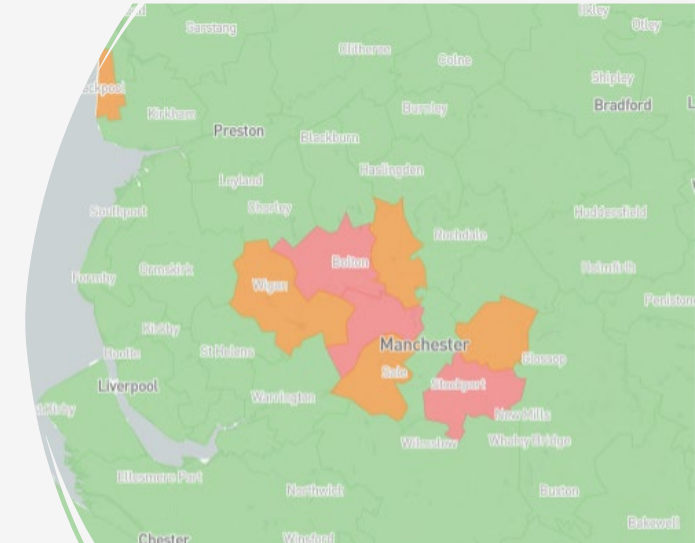
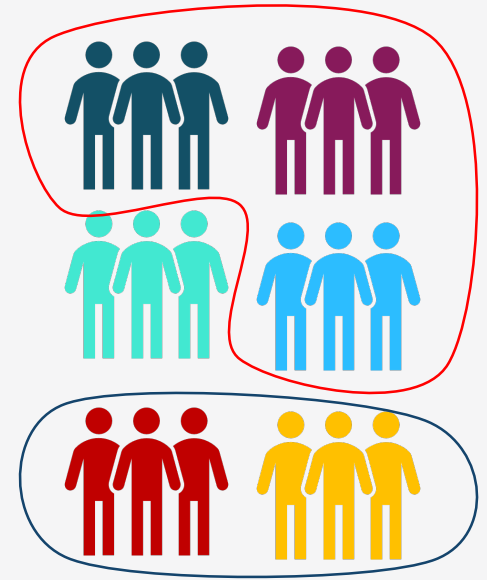
Implementing an Adaptive Survey Design



- Dividing a sample into smaller groups that have similar characteristics (segmentation)
- One size does not fit all - apply alternative survey design features for different groups:
 - Survey Modes
 - Engagement strategy (eg materials, timings)
 - Incentives
 - Follow-up
- Objective to improve targeted survey outcomes (eg reduce non-response bias) within certain budgetary constraints

Features of adaptivity

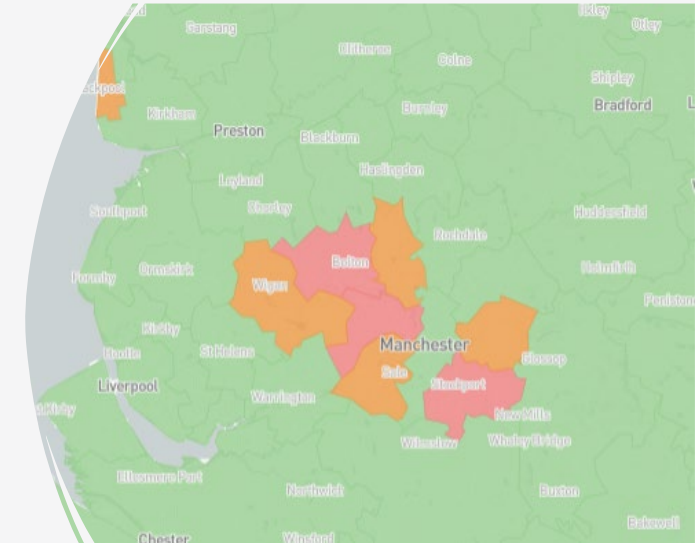
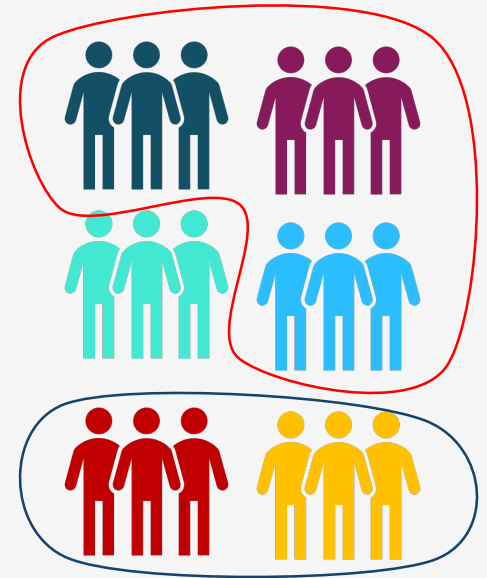
1. Using a logistic regression model on historical LFS data, on variables such as age, location and country of birth, the most likely predictors of likelihood to respond to the survey suggested **dividing the sample into 8 different strata**:
 - Age (<45)
 - Urban/Rural Classification (Urban)
 - Index of Multiple Deprivation (IMD deciles 1-4)
2. Utilising “**knock-to-nudge**” with **geographic targeting** based upon under-represented strata
3. Utilising quality and cost indicators, moving beyond basic response rate using **Representativity Indicators** to measure the contrast between respondents and non-respondents
4. Implementing a **structured ‘trial and error’ optimisation strategy**, starting with a simple design then experimenting, documenting, evaluating, and improving features of the ASD as technical and admin systems improve over time



Development still underway

... of the Adaptive Survey Design:

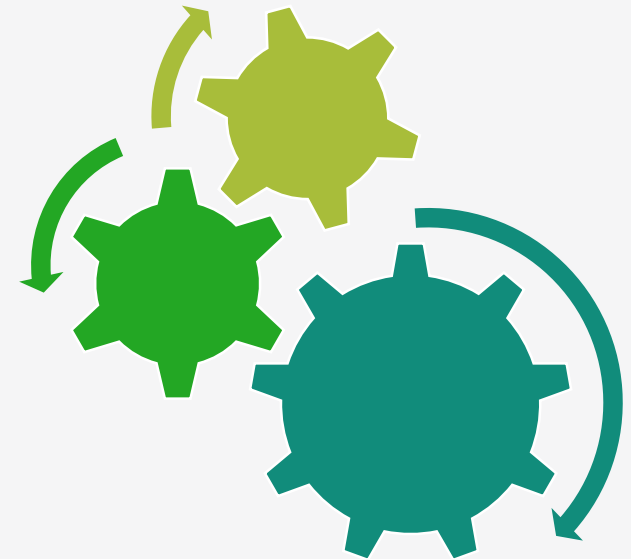
- Started rolling out first elements of ASD from November, undertaking continuous evaluation and iterative development
- Monitoring effectiveness and needs with a Management Information Dashboard updated in (almost) real time
- Continuing to explore alternative auxiliary data sources and options around incentives and respondent materials



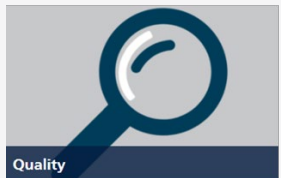
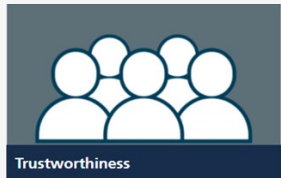
Development still underway

... of the rest of the transformation:

- Conducting analysis and investigation of collected results
- Tweaks and adjustments to fix operational issues
- Monitoring and adjustments to quality
- Further delivery of questions and content
- Further methodological development including approaches to estimation and wave structures



Celebrating years of the LFS



- Planning series of publications and webinars covering aspects of design, indicative results and [updates on progress and plans](#) through 2023
- Further developing the user guidance with more methodological information, performance on quality and additional delivery of content
- Continuing the long legacy of a vital source of survey data designed in the best way possible to meet your needs
- Keep in touch through Labour.Market.Transformation@ons.gov.uk

Make sure you are part of the engagement:
Labour.Market.Transformation@ons.gov.uk

Any questions?

