REPORT BRIEFING · MARCH 2026

Digital Access Affordability

Analysis of household digital costs using ONS Living Costs and Food Survey 2023–24

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Briefing for the UK Digital Inclusion Action Plan · Companion analysis to the Minimum Digital Living Standard

CONTEXT

Affordability is the second-most cited barrier to going online

24%

of UK households reported at least one affordability action in the last month

Source: Ofcom Affordability Tracker

19%

of households with internet access spend more than 3% of income on access

ONS LCF Survey 2023–24

3%

of households remain offline; another 7% are mobile data only

ONS LCF Survey 2023–24

FOUR QUESTIONS GUIDING THIS REPORT

1. How can we measure internet affordability and identify households ‘at risk’ — akin to fuel or food poverty?
2. What share of offline or mobile-only households could afford to move to broadband via a social tariff?
3. What share would still be in stress even after a social tariff — i.e. need additional support?
4. How much Ofcom-reported affordability behaviour reflects income stress versus normal market shopping?

A minimum digital living standard includes having accessible internet, adequate equipment, and the skills and knowledge people need.

It is about being able to communicate, connect and engage with opportunities safely and with confidence.

The Minimum Digital Living Standard

image owned by the University of Liverpool and MDLS project partners - free to use

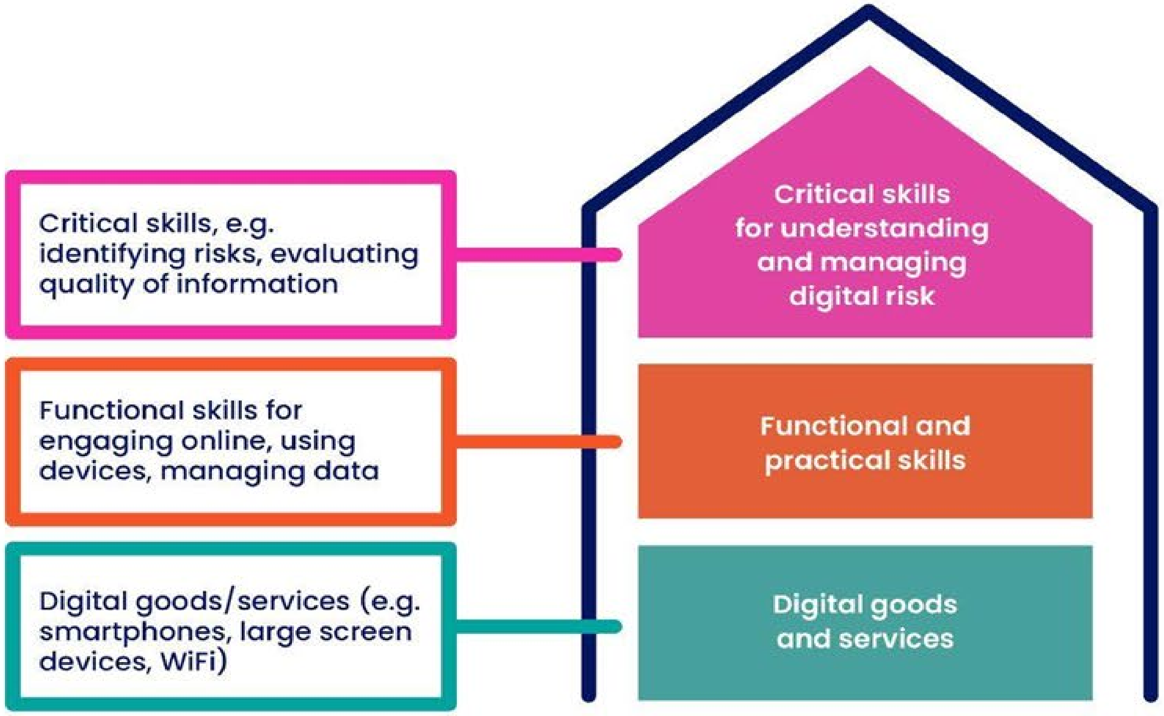
What is ‘enough’ for households with children?

Parents and young people defined what is ‘enough’ for a household with children to feel digitally included.

They thought about:

- What devices (entry level) and internet services a household needs to take part in society
- What skills they need for practical tasks and digital safety
- How needs change with family size and school stages

These are the MDLS ‘contents’.



Developing a statistical model

Constant 0.793^(**) (0.341) * p<0.1; ** p<0.05; *** p<0.01

Social grade and area deprivation (compared to AB)	
NRS grade C1	-0.267 (0.174)
NRS grade C2	-0.569*** (0.183)
NRS grade DE	-0.774*** (0.212)
Combined IMD rank	-0.00002* (0.00001)
Household composition	
Single parent	-0.271** (0.106)
2+ children	-0.521*** (0.125)
Work and benefits	
Receives at least one state benefit	-0.318* (0.163)
Chief income earner working	0.363* (0.196)
Health	
Respondent has a health issue affecting daily activity	-0.698*** (0.191)
Ethnicity	
Respondent identifies as ethnically non-white	-0.698*** (0.159)

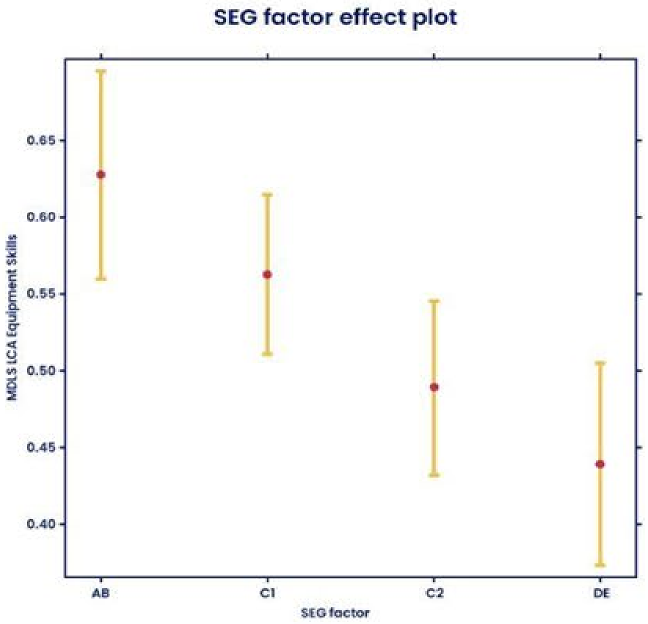
Town size (compared to a large city)	
Smaller city or large town	0.866 (0.561)
Medium town	1.237** (0.558)
Small town	1.550*** (0.546)
Rural area	1.417** (0.573)
Region (compared to London)	
East England	-0.932 (0.605)
West Midlands	-1.144* (0.598)
SE England	-1.370** (0.598)
Yorks & Humber	-1.290** (0.605)
Wales	-1.404** (0.635)
SW England	-2.046*** (0.611)
East Midlands	-1.461** (0.619)
Scotland	-2.102*** (0.551)
NE England	-1.651** (0.654)
NW England	-1.978*** (0.608)
N Ireland	-2.478*** (0.655)
Log Likelihood	(-973.519)
Akaike Inf. Crit.	(2,003.038)

A single-parent household with one child living in an area of relative affluence in South East England **may be 4.5 times more likely to meet MDLS** than a single-parent household with more than two children, living in an area of higher multiple deprivation in North East England, where the parent has a long-term health issue.

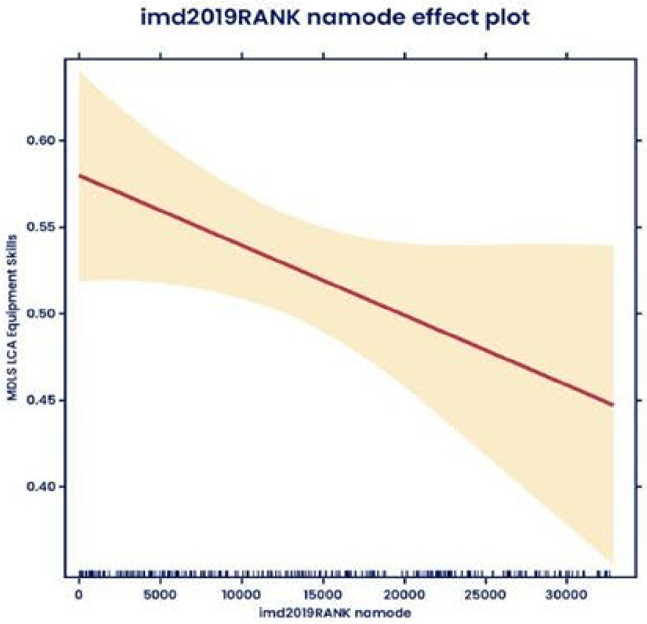
A dual-parent household, social grade AB, with two children, working and living in a small town in Wales **may be 5.1 times more likely to meet MDLS** than a dual-parent household, social grade DE, with two children, working but receiving benefits, where parents identify as non-white, and living in a small town in Wales.

Modelling the chances of meeting MDLS

Households with children in social grades C2, and DE are 1.7 and 2.1 times less likely to meet MDLS than those in social grades A and B



With each worsening decile in the Index of Multiple Deprivation for the household's area, the chance of meeting MDLS falls from 1.0 (least deprived) to 0.59 (most deprived)



Single parents are 1.3 times less likely to meet MDLS than dual-parent households.

Households with more than two children are 1.68 times less likely to meet MDLS than those with two or less children.

Households where the respondent identified as ethnically non-white are 2.01 times less likely to meet MDLS than those where the respondent identified as white.

Households where the respondent has a health issue affecting daily activity are 2.01 times less likely to meet MDLS than those where the respondent did not.

Households with children getting at least one state benefit are 1.38 times less likely to meet MDLS than those which do not.

Image created by author (generated in R from source data - MDLS survey)

APPROACH

Building affordability measures from ONS LCF Survey data

4,202
households sampled
nationally representative

90 / 7 / 3%
broadband / mobile-only / offline
of UK households

£12.34
mean weekly internet bill
across online households

3 / 5 / 10%
stress thresholds tested
share of household income

Four core indicators

Each captures a different angle of cost burden

DCI
Digital Cost Indicator

Weekly cost of the items that, if removed, would deprive the household of internet access.

DCI %
Digital Burden Ratio

DCI as a percentage of weekly household income.

CCI
Complete Telecoms Cost Indicator

Total weekly spend on internet, mobile, landline and TV services for the household.

CCI %
Complete Telecoms Burden Ratio

CCI as a percentage of weekly household income.

DISAGGREGATIONS

We test stress across...

- Broadband, mobile-only and offline households
- Income quintiles (Q1–Q5)
- Official poverty (60% median income)
- Equivalised income (McClements & OECD)
- Share of income from benefits
- MDLS equipment proxy
- UK regions, wards, LSOAs

Why a 3% of-income cut-off is a defensible affordability indicator

Anchoring digital affordability to existing UK poverty measures

Average internet cost (£622.89/yr) is ~36% of an average UK energy bill (£1,750/yr). Applying the historic 10%-of-income fuel-poverty rule pro-rata gives a digital equivalent of 3.6% of income — close to the 3% stress cut-off.

Fuel poverty

Pre-2021 measure: 10% of income on energy.
Pro-rata for internet ≈ 3.6% of income.

✓ supports 3%

Food poverty

Lowest income quintile spends 14.3% on food.
Adding internet pushes this to ~24% of income.

✓ supports 3%

Ofcom Tracker

24% of households took some affordability action; ~19% are at the 3% stress mark.

✓ overlaps 3%

WORKING DEFINITIONS USED IN THIS REPORT

3% of income

general affordability stress

LILI

‘Low Income, Low Internet’ — in poverty and mobile-only

Social-tariff > 3%

social tariff alone still pushes a household past 3% of income

HEADLINE FINDING

Affordability stress is concentrated in the lowest income households

THE GAP

55%

of the lowest-income quintile (Q1)

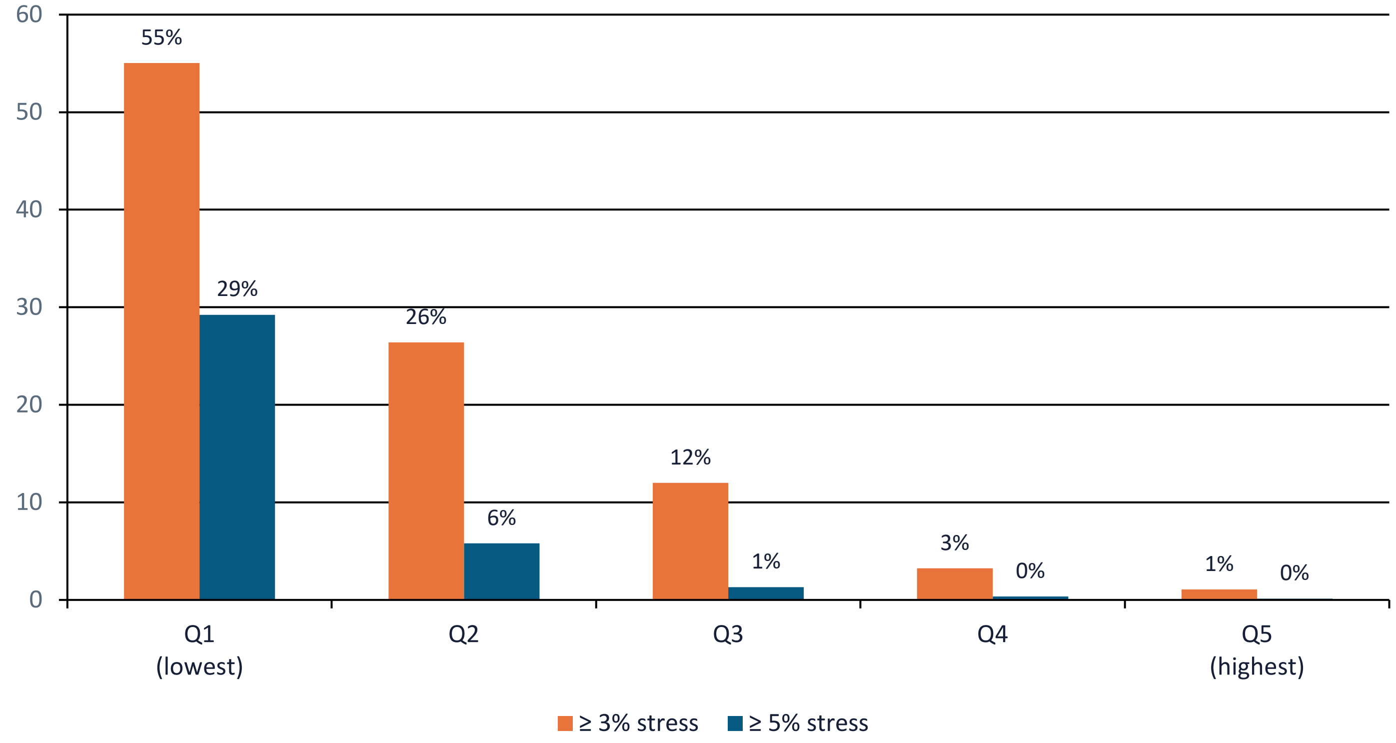
spend more than 3% of income on internet

Versus only

1.1%

in the highest-income quintile (Q5)

% of households at affordability stress, by income quintile



Source: ONS Living Costs and Food Survey 2023–24, n = 4,066 online households (Table 5) .

Image created by author (generated in R from source data - LCF survey)

Stressed households have lower equivalised income and rely more on benefits

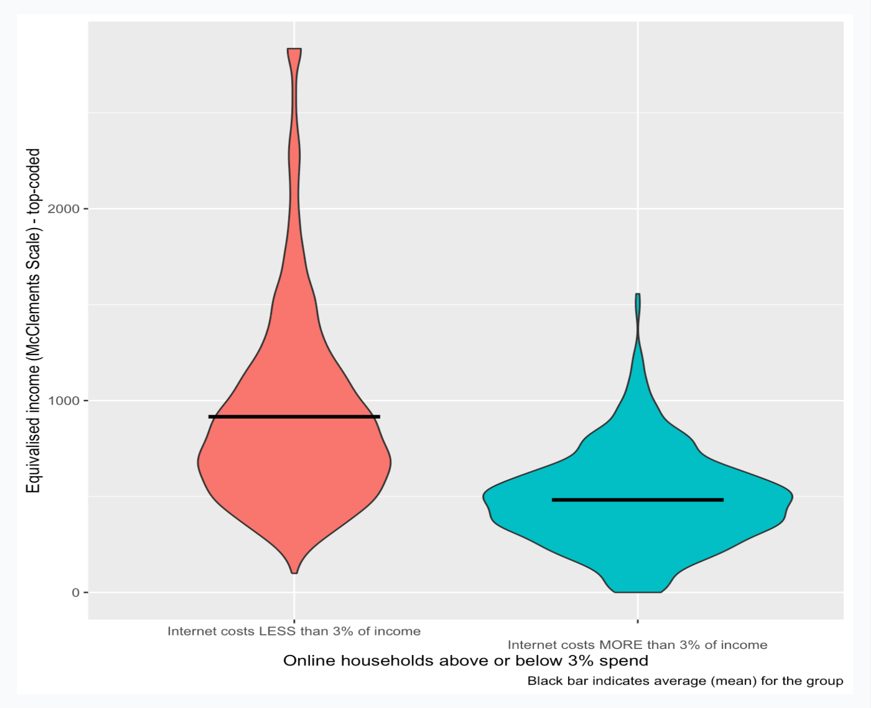


Figure 1: Equivalised income (McClements) by 3% stress

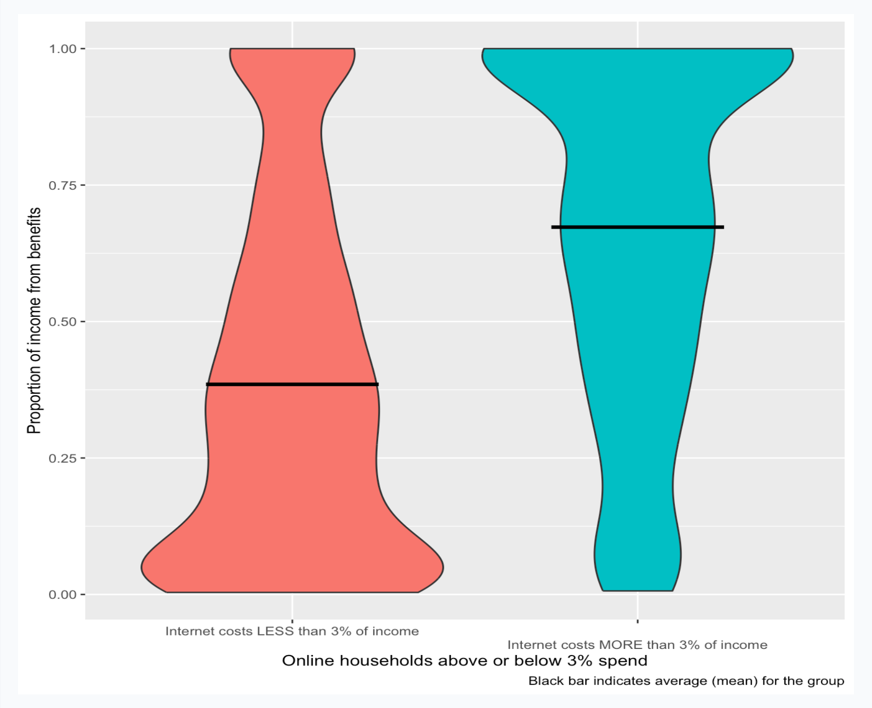


Figure 3: Share of household income from benefits by 3% stress

WHAT THE DATA SHOWS

64%

of households in poverty are at 3% stress

39%

of households in poverty are at 5% stress

76%

of stressed households receive benefits income

Statistical test: Differences between stressed and non-stressed households are highly significant — McClements **F=566.31, p<.001**; OECD **F=543.46, p<.001**.

AT-RISK GROUPS

Three populations with distinct affordability profiles

GENERAL STRESS

3%-of-income group

18%

of UK households

5.21M

≈5.2 million households

- Includes households on combined packages and multiple-device plans alongside lower-income groups.
- Strongly skewed to Q1 (54% of group) and to benefits recipients (76%).
- A flexible umbrella indicator overlapping closely with Ofcom's affordability behaviour metric.

MOST VULNERABLE

LILI — Low Income, Low Internet

2%

of UK households

78 (sample)

in or pushed into poverty by access costs

- Mobile-only households in official poverty, or pushed into it by basic mobile costs.
- Cannot afford a social tariff: 65% would still be at 3% stress after a £20/month tariff.
- Spends ~£196/yr on telecoms — too little to cover current broadband social tariffs.

SHIFT-COST GROUP

Mobile-only & offline households

10%

of UK households

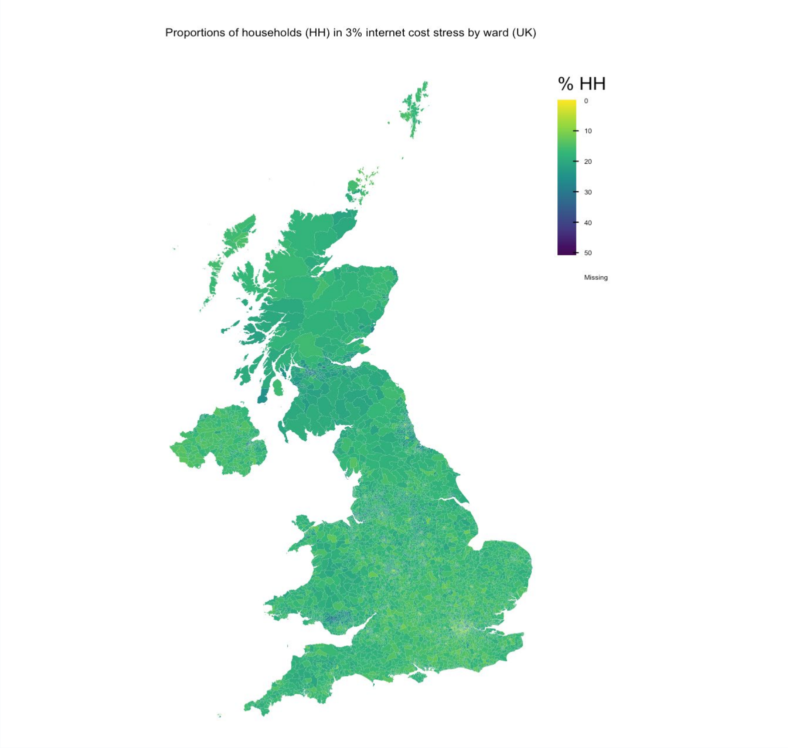
2.84M

without a fixed broadband connection

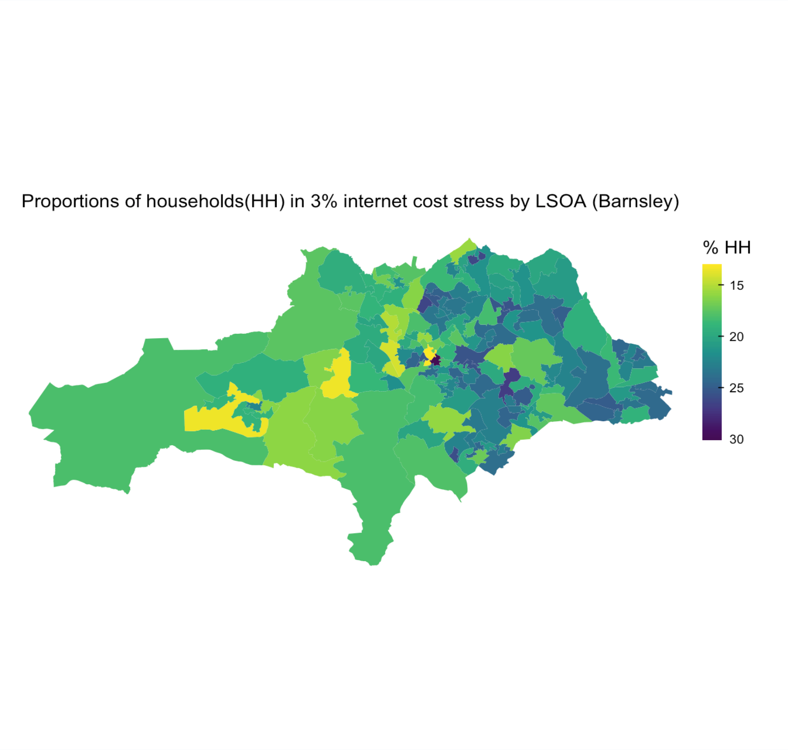
- Half could save money by switching to a social tariff plus low-cost mobile contract.
- The other half (≈1.0M) would face ~£13/month more to gain broadband while keeping mobile.
- Some offline behaviour reflects accommodation barriers, not affordability alone.

Stress varies sharply by ward and neighbourhood

United Kingdom — by ward (2023)



Barnsley — by LSOA (Tech Town)



WHY MAPPING MATTERS

Hotspots cluster

in deprived urban wards and former industrial areas.

Within-place variation

In Barnsley LSOA stress ranges from <15% to >30%.

Targeting potential

Ward & LSOA estimates support council-level action.

GMCA and Barnsley were selected as illustrative cases — Barnsley as 'Tech Town' and GMCA for its current local affordability work. Images created by author (generated in R from source data - LCF survey)

POLICY IMPLICATIONS

What different interventions can — and cannot — reach

REACHABLE VIA CURRENT MARKET / SOCIAL-TARIFF OFFER

1.74M
households
could move to broadband affordably with current social-tariff and low-cost mobile offers

1.01M
of those would pay ~£13/month more
an information and switching gap, not a pure income problem

0.40M
households (≥3% stress)
would still face significant affordability problems even on a social tariff — the residual hard core

INFORMATION

Consolidated, simple price comparison for combined broadband + mobile and social tariffs.

→ For 1.74M households who could already save

SWITCHING SUPPORT

Targeted help to switch as part of the copper switch-off, including ‘social tariff plus mobile’ bundles.

→ For the 1.01M who face higher bills despite affordability

DIRECT SUBSIDY

A monthly voucher (~£13) bridging social-tariff cost for the lowest-income, hardest-to-reach group.

→ Total cost ≈ £4.6M / month · £54.2M / year

Affordability is measurable — and policy needs three tools, not one

01 **A 3%-of-income cut-off**

behaves like the historic fuel-poverty rule and maps onto Ofcom’s affordability behaviour. It is a robust headline indicator.

02 **LILI flags the most vulnerable**

Mobile-only households pushed into poverty by access costs are the residual hard-core group for whom the market cannot solve affordability.

03 **The market can do most of the lifting**

≈1.74M households can move online affordably through information and good social-tariff offers. A narrow voucher can close the rest.

04 **Beyond access**

For those on low incomes, sustaining digital participation is a much higher proportional burden — the broader MDLS agenda still applies.