

Affordable internet access for all: summary of insights and evidence

A What Works? Co Lab Report from
Good Things Foundation

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Foreword

Internet access is essential across every area of our lives, and in every community. With worries high about living costs, we know how important it is to address the cost barriers that prevent people from getting online or staying connected.

An estimated 221,000 Greater Manchester households spend 3% or more of their income on internet costs, and around 56,000 households could not afford a social tariff even at less than 3% of their income. We heard from people in communities about how this impacts their lives. Feelings of stress, anxiety, and frustration. Being locked out of essential services. Isolation, and lacking confidence to go out.

Last year, in *'Tackling Data Poverty: Innovation and Collaboration'*, we called for a 'rebalancing of responsibility' to address data poverty for people on low incomes or in challenging circumstances. This year, in collaboration with Autotrader, Greater Manchester Combined Authority, and University of Liverpool, I'm proud and excited we are bringing something distinctive to the debate on internet access.

This, our second What Works? Co-Lab report on tackling data poverty, summarises the evidence on which a 5-year roadmap for the region is based. Taking a regional lens, we show what is already happening in one English region, and suggest what could work better, and in more places. This speaks to the important role of regional and local leadership at a time when devolution is high on the agenda. And it does so without letting national government policy makers off the hook.

The roadmap that this evidence underpins gives stakeholders across the region a basis to decide together where to act, and where to test and learn. I hope it can also be used by leaders and partners in other areas, across all four nations, as part of rebalancing responsibilities, while also highlighting the urgent need for national government action on a new affordability settlement for internet connectivity.

Internet access is essential. Levers exist at all levels. Let's ensure we use them.

Dr. Emma Stone,
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Introduction

Defining data poverty

Data poverty can be defined as when individuals or households cannot afford sufficient, secure mobile and / or broadband data to meet their needs.¹ Across the UK, affordability of internet connectivity is a challenge faced by many households: **2.3 million households** struggle to afford their mobile phone contract, and **1.7 million households** struggle to afford their broadband costs.²

Without access to reliable, sufficient mobile connectivity or broadband, people can find themselves excluded from accessing essential services – healthcare, housing, financial services, welfare support, education and employment. They can also face increased social isolation, and may pay higher costs for basic goods and services – **up to 25% higher** – than those online.³

With the rising cost of living, many people may have broadband or mobile connectivity but find themselves having to reduce or remove their access, to be able to afford other essentials such as food and heating. **A third** of DWP customers said they had already taken steps to reduce their expenditure on internet and mobile data usage so that they could continue to afford other bills, and **11%** plan to give up using broadband or mobile data so that they can continue to afford other bills.⁴ Among people referred to food banks, **one in seven** (14%) have no access to the internet; **only two fifths** (42%) have access in their homes through Wi-Fi, and **half** (51%) have access through a mobile phone network.⁵

Further, this affordability challenge is not experienced equally. DWP customers from marginalised groups are disproportionately affected by the cost-of-living crisis and having to take steps to reduce the cost of connectivity, including full-time carers, unemployed people and people with a long-term health condition or disability.⁶

In 2025, Good Things Foundation reviewed the last five years of innovation and collaboration to tackle data poverty, and set out ideas for future change.⁷ We called for a rebalancing of responsibility and, within this, pointed to the important role of combined and local authorities. In this report, we seek to build on this learning by taking a place-based approach to exploring what could work to address data poverty in Greater Manchester, and to ensure all residents of the region can afford internet access.

A focus on Greater Manchester

Challenges around the cost-of-living and affordability of internet connectivity are similar in Greater Manchester to the national picture. The region has relatively more deprivation than the rest of the country: **five out of 10 local authorities** in Greater Manchester are in the **top 30 most deprived** local authorities in England, with Manchester City in the top 10.⁸

Greater Manchester Combined Authority has been a leader in tackling digital exclusion more broadly, and access to connectivity since 2021. This was reaffirmed at the Greater Manchester Digital Inclusion Summit in October 2025, with a commitment to ensure that, within five years, no resident of Greater Manchester should be offline due to the cost of connectivity. This commitment has been the impetus for partnership work between Good Things Foundation, Greater Manchester Combined Authority, Autotrader and University of Liverpool, to develop a [five-year roadmap for action](#) to address data poverty in the region.

In this report we summarise insights and evidence about the current picture of access to affordable connectivity for Greater Manchester residents. We also present an assessment of options for action to reduce data poverty across the region. The summary of evidence in this report underpins the recommended actions in the [five-year roadmap](#) for Greater Manchester.

We hope that the insights in this report will also be relevant for taking action on data poverty in other regions beyond Greater Manchester, by presenting options that fit with a place-based approach to supporting digital inclusion. We also recognise that many of the drivers of – any solutions to – data poverty are not bound by place, but require the engagement and commitment of national-level stakeholders. As such, we intend for this report to prompt conversation about how national government and industry can support and build on work at the regional and local levels to ensure no one is excluded from internet connectivity due to cost.

Summary of process

This summary of evidence and insights, and the accompanying [roadmap for action](#) have been developed through a discovery project in partnership with Greater Manchester Combined Authority, and funded by Autotrader. Between April and August 2026, a range of evidence gathering activities were undertaken to understand i) the current picture of approaches to addressing data poverty across Greater Manchester, ii) the needs and experiences of residents around data poverty, and iii) opportunities for action. These activities included:

- Desk research and data analysis
- Workshops with local, regional and national stakeholders, including representatives from the digital inclusion, VCSE, health, housing, and employment sectors, and telecommunications service providers
- Strategic conversations with key stakeholders across Greater Manchester
- Community engagement work in three local authority areas, speaking with residents supported by community organisations and housing associations, to explore the lived experience of data poverty and the acceptability of proposed solutions.

About Greater Manchester and its residents

Greater Manchester is home to over 3 million residents, and has seen a 5% increase in its population since 2021.⁹ Below we summarise key demographic information about Greater Manchester's population, with relevance to understanding the picture of data poverty across the region.

Category	Key information
Age ¹⁰	• Median age: 36 • 16% of residents are aged 65+
Income	• GDP per head: £21,730 (UK: £25,965)¹¹ • 28% of children under 16 live in relative low income families before housing costs (UK: 19%); 33% after housing costs (UK: 26%)¹²
Employment levels (aged 16–64) ¹³	• 72% employment rate (UK: 79%) ◦ LAs with lowest employment rate: Oldham (64%) and Rochdale (67%) • 5% unemployment rate (UK: 5%), rising to 9% ethnic minority unemployment rate (UK: 8%) ◦ Local Authorities with highest unemployment rate: Bury and Rochdale (8%); highest ethnic minority unemployment rate: Bury (18%) and Oldham (16%) • 24% economically inactive (UK: 21%)
Housing ¹⁴	• 1.2 million households ◦ 58% of households own their properties ◦ 21% of households live in social rented housing ◦ 21% of households live in private rented housing ◦ 1% of households live in shared ownership properties

Who is affected by data poverty in Greater Manchester, and its impacts

From the most recent Greater Manchester Residents' Survey from November 2025, we know that **50%** of residents in Greater Manchester report being online with no barriers or vulnerabilities.¹⁵ That leaves **half the population** facing one or more barriers or vulnerabilities to being online, including **30%** of residents who face access and skills barriers, and around **5% face financial vulnerability** to being online.

The scale of data poverty in Greater Manchester

Compared to the UK as a whole, **residents in Greater Manchester face higher affordability challenges for internet connection in general.**

New analysis of the ONS Living Costs and Food Survey by Prof. Simeon Yates^{16, 17} estimates the number of households across Greater Manchester facing digital connectivity affordability issues:

- ~ **221,000** spend ≥ 3% of income on internet costs alone
- ~ **56,000** in poverty would not be able to afford a social tariff, even at less than 3% of their income
- ~ **33,000** are on low income with mobile-only internet

Group	Est. number of households (GM)	% of households (GM)	% of households (UK average)
Households spending ≥3% of their income on total telecoms	485,000	41%	38%
Households spending ≥ 3% of income on internet costs alone	221,000	19%	18%
Households in poverty who would not be able to afford a social tariff, even at less than 3% of their income	56,000	5%	4%
Households with mobile-only connectivity and in poverty	33,000	3%	2%
Households that are online and can afford a social tariff or better	1,000,000	85%	87%

Barriers to connectivity in Greater Manchester

Our community engagement and stakeholder research identified four core categories of barriers that prevent Greater Manchester residents from accessing sufficient, reliable connectivity:

- **Affordability**
- **Infrastructure**
- **Knowledge, confidence and trust**
- **Wider digital exclusion**

Affordability

- The **cost of standard broadband and mobile contracts** are out of reach for many people on low income (as demonstrated by the affordability analysis above). This can be exacerbated by **mid-contract price rises**, and / or **exit fees** which may prevent people from switching providers.
- The **relative high cost of pay-as-you-go data** for those who can't afford or can't access a contract for broadband or mobile data.
- The difficulty in being able to afford **enough** connectivity to meet the needs of the individual or household.



Among residents in Greater Manchester with a smartphone but without unlimited data, **12% run out of data** at least **every two to three months**, and **5% run out every month**.²⁰

"Families are on multiple devices all at the same time, people doing homework, people gaming, people watching TV and often either the signal isn't strong enough or they [can't]... afford the strong enough data" – Industry stakeholder

Infrastructure

- **Poor connectivity** and / or **mobile signal 'black spots'** in some areas.
- Challenges to accessing broadband in **social housing, private rental** or **temporary accommodation**.

"I was given 6 months wifi but it wasn't working at home. It was a [mifi] box but because I'm in the basement it just didn't work" – Greater Manchester resident

Knowledge, confidence and trust

- Lack of **awareness of support services** for those experiencing data poverty.
- Lack of **confidence and / or capability** to navigate and understand options for connectivity, compounded by **language, literacy and accessibility barriers**.
- **Mistrust** of council and / or other services.

"It's like, 'mobile data'. What the hell are they talking about, you know? I kind of know what it is, but then when it comes to doing it..." — **Greater Manchester resident**

"Being offered support sometimes can be very challenging... They don't want it from [someone in] a position of superiority going, here, we must help you. It can't be like that." — **Industry stakeholder**

Wider digital exclusion

- Lack of access to a **suitable digital device** (due to poverty, accessibility needs, knowledge and / understanding).
- Lack of **wider digital skills** and **confidence**.

Priority groups

In addition to people experiencing poverty, we know that there are specific barriers faced by different groups of people in accessing broadband and / or mobile connectivity across Greater Manchester. There is intersectionality between these groups, and with experiences of poverty, but it is also helpful to consider the specific needs of people with the following experiences, in relation to data poverty:

People in temporary or unstable accommodation: they may not be able to afford mobile connectivity (or a device). They may not be permitted to establish a broadband connection in their accommodation, or may be reluctant due to not knowing how long they will stay. They may find thinking about a broadband or mobile contract may be too overwhelming for them in their situation.

The uncertainty of temporary accommodation, sometimes being placed into a bed and breakfast, which could be in or outside the borough, creates a huge disruption for those families” – Industry stakeholder



- Around **7,500 households** live in **temporary accommodation** in Greater Manchester ¹⁹
- Over **19,000 households** were assessed as **homeless or threatened with homelessness** from 2024-25 ²⁰

Low income households with children or other large households: they may have greater connectivity needs (eg for work, education, entertainment) but may be unable to afford sufficient broadband or mobile connectivity to meet the needs of everyone in the household. They may decide to prioritise paying home broadband over mobile data, so that multiple people have access to connectivity in the home, but meaning that they will be reliant on public wifi networks when outside the home, or will be restricted in what they can do when out of the home if internet connection is required.

“[If] you have Wi-Fi, all your children they can use it” – Greater Manchester resident

People in social housing or private rented accommodation: some people may struggle with accessing permission to establish a broadband connection in their home, and / or face infrastructural barriers to accessing broadband.

People living in areas or specific buildings with poor connectivity: they may struggle to access mobile signals for connectivity, or have low or unreliable broadband connectivity.

People with health conditions or disabilities: if they can't access or afford home broadband, their conditions or disability may mean they struggle to access spaces with free wifi (eg in libraries) or other connectivity support outside the home. Recent research (using the [Indicators of Digital Inclusion](#)) found that nine in ten respondents raising disabled children are digitally excluded, or at risk of being offline.²¹



There are **526,000 disabled people** in Greater Manchester (18% of the region's total population)²²

People who are unused to accessing support services: they may not know where or how to access support from council or other services for affording connectivity, for example people who are newly unemployed with no experience of welfare or support services.

"We've had lots more people over the past few years who, you know, they've always been employed and they've recently lost a job... So they are in poverty within two months or even less than that... But they have no idea what they're entitled to... they've got no clue who to speak to or where to go because they've never had to rely on those services" — Industry stakeholder

People with other vulnerabilities or complex needs: such as care leavers, victims of domestic abuse, refugees and asylum seekers, people with English language or literacy barriers, who may face additional challenges in relation to access, affordability, knowledge and understanding of connectivity.



- There are ~ **4,200 care leavers** under 25 across Greater Manchester²³
- **66,400** residents in Greater Manchester (2%) **cannot speak English well or at all**²⁴
- More than **7,500** people were receiving **asylum support** in the region as of June 2026²⁵

Impacts of data poverty

The implications of digital exclusion are wide-reaching, affecting access to a range of resources, services and aspects of modern life, as captured in Kat Dixon's *Periodic Table of Internet Elements*.²⁶ The key areas of impact of not being able to go online enough, or at all, due to data poverty include:

Being locked out of essential services, including accessing healthcare, immigration processes, children's education processes, bidding for homes, Universal Credit requirements, and other welfare services.

Feeling isolated, and lacking confidence to go out and about due to lack of connectivity for navigation, for accessing information about public transport or for using digital parking apps:

"Parking apps, there's so many parking apps... there's always a struggle... so I don't drive anywhere where you've got to park your car. I think that is something else that causes isolation really, 'cause you're limited in where you go" –

Greater Manchester resident

Stress, anxiety and frustration caused by services requiring online engagement, contributing to feeling demotivated to go online, and to feeling like you are being forced to pay to access services digitally that used to be free, and amid widespread rising costs:

"[They] close the banks and everything, [expect] people to go online and not only that, they're expected to pay for the privilege of using their services... The bank should pay" –

Greater Manchester resident

Learning from what's already happening in Greater Manchester

Recent work through the Data Poverty Lab has led to the development of the CHES framework for defining dimensions of 'good' solution to data poverty:²⁷

- **Cheap** – affordability of the solution, including over time
- **Handy** – easy to find out about, apply for and access
- **Enough** – sufficient connectivity to meet essential needs, including sufficient speed and data
- **Safe** – solution ensures that privacy is protected
- **Suitable** – the solution is acceptable, suitable and flexible for personal circumstances.

There are already a range of initiatives and models in place (or recently delivered) across Greater Manchester that can help to address and reduce data poverty. These models operate in different parts of the region, and in different contexts, some supporting specific groups of people, others available to the wider public.

Below we describe these models and what's known of their opportunities and challenges, reflecting dimensions of the CHES framework. The models are categorised in relation to:

- **Place:** models delivering connectivity in public and / or community spaces
- **Groups:** models designed to meet the needs of specific demographic groups
- **Individuals:** models providing connectivity to individual residents.

Place	Groups	Individuals
1. Free public wifi 2. Mesh networks 3. Free connectivity in trusted community spaces	1. Connectivity for social housing tenants 2. Connectivity for people seeking employment 3. Connectivity for people experiencing financial crisis or shock 4. Connectivity for people in temporary accommodation 5. Connectivity for care leavers	1. Free mobile data through Databank 2. Connectivity through 'wifi in a box' 3. Social tariffs 4. Signposting to digital support

Place-based models

Free wifi provision in public places

Opportunities

There have been a number of initiatives for establishing free wifi networks across public spaces in Greater Manchester. These include networks in Manchester City centre and other outside spaces, such as via the SWIFT network in Tameside; in libraries and other public buildings such as via Salford's 'freebee' network. There has also previously been provision of free wifi on Greater Manchester's public transport network (buses and trams).

The GM One Network, building on the roll-out of local full-fibre networks (LFFN) across the region, is establishing a single active network infrastructure across public sector organisations. This is with the aim of enabling users to move more easily between free public wifi networks in public spaces across the region.²⁸

Access to free public wifi is a vital source of connectivity for some people, and places such as libraries are often highly valued as places to access wifi more securely and safely than other locations, such as a cafe.

"Because I don't have enough data, I use [wifi] in the library... when you are doing [online] payments usually the library is open" – **Greater Manchester resident**

Who can benefit:

- People without access to broadband at home and / or with no or limited mobile connectivity

Limitations

Residents can lack trust in the security of public wifi connections and some may lack knowledge or confidence in how to keep safe when using public wifi. These concerns can relate to the perceived security of the network itself and also privacy concerns about who else in the space might be able to see their activity. This can mean some residents will choose not to use public wifi or will avoid using it for specific sensitive tasks, such as making purchases, or entering financial or health information.

"I used to volunteer for [a] centre in Manchester which is a homeless area and they recommend you don't log in the city centre [wifi networks] because it can cause viruses to your phone... they say to the homeless, if you've got a phone, don't log [in], because there's that much cyber [crime]" – **Greater Manchester resident**

Limitations (cont.)

Public wifi networks may also have **restrictions on the type of websites** and content that can be accessed, meaning in some places, residents may be restricted in what they can view or do online. For example, in libraries in Stockport, people cannot access social media or streaming services. A stakeholder gave the example of parents going to the library to use the digital services, and needing access to streaming sites to keep their children entertained while completing their tasks. Residents may find the rules around what can be accessed through wifi in public spaces offputting.

"Sometimes [the libraries] say, don't do it with this or that... we put you in trouble... even if you go there to search something. It's not encouraging... Sometimes if you go there you cannot get anything that will make you happy. Because it's only [a] few websites" — **Greater Manchester resident**

Reliance on public wifi can be challenging for people who experience barriers to **travelling to spaces offering free wifi**. Community residents highlighted factors preventing people from using currently available free wifi, including mobility issues, a lack of suitable places (such as libraries) in their local area, and travel costs. 10% of residents in Greater Manchester live a 30 minute walk or more from their local library.²⁹

One resident described his frustration at the discontinuation of free wifi on buses in Manchester, meaning he has to travel further to his local library, which can sometimes be challenging due to his ill health:

"I used to use [wifi] on the bus... They don't allow it anymore... I have to wait till I get to the library... I have to travel to the library, I have arthritis, sometimes I struggle to get to the bus stop without aches and pains" — **Greater Manchester resident**

Who might miss out:

- People with disability or other accessibility barriers to accessing suitable public spaces with wifi
- People with low digital skills or confidence to connect safely to public wifi

Free connectivity in trusted community spaces

Opportunities

Trusted community spaces, such as local community organisations or places of worship, can be supported to offer access to free connectivity for residents engaging with their other services. As of June 2026, there are 662 organisations across Greater Manchester that are registered as members of the National Digital Inclusion Network, and who provide (or wish to start providing) digital inclusion support. These spaces may feel more accessible and appealing to people who might not feel comfortable in other public spaces such as libraries, or who need additional support to get online, for example due to language, skills or confidence barriers.

There are examples of community organisations receiving free broadband connectivity that they can make available to residents, through social value initiatives. The LFFN Project and GM One Network initiative successfully leveraged social value procurements to negotiate 5 years of free connectivity for specific community sites, such as Stevenson Square in Smallbridge, Rochdale.^{30, 31} Be One Homes in Bolton has provided free connectivity to community centres, for wifi access for their tenants.

Across Greater Manchester, the Live Well initiative has established a set of 'hallmarks' for Live Well Centres, Spaces and Offers, to ensure consistent wellbeing support.³² These include the expectation for all Live Well Centres to be 'digitally enabled and community-connected', providing free wifi, devices and support to accessing online services. In Oldham, Action Together, who support the local VCSFE sector, are intending to offer grants for organisations to help them meet the hallmarks for Live Well Spaces, which may include funding for wifi connectivity.

Who can benefit:

- People who lack trust or confidence to access wifi in public spaces
- People with additional support needs for getting online.

Limitations

Access to the connectivity will be **restricted to the operating hours** of the community organisations, and there may be **restrictions on connectivity speed** and / or **the number of people that can be supported** to access connectivity at these venues.

The Live Well initiative's hallmarks help to set out expectations for connectivity across their spaces, but it is not clear to what extent this is met and accessible to residents, particularly in the wide range of Live Well Spaces.

There are concerns about the **longer-term sustainability** of this model, for example whether community organisations would be expected to continue to pay for the connectivity after the initial social value investment.

Limitations (cont.)

It is also acknowledged that there is a lack of consistency in how social value for supporting connectivity is built into procurement processes across Greater Manchester.

Who might miss out:

- People who are unaware or unable to access services through community organisations.

Free connectivity through mesh networks

Opportunities

A mesh network is a community wifi model, where a fixed broadband connection is amplified to provide free civic wifi across a geographical area.

Rochdale Mesh Network is an example of how this model has been used in two areas of social housing (College Bank and Falince), to provide wifi connectivity to which people can connect with their own devices.³³ The council funded a three-year broadband contract, while equipment and installation costs were met by non-profit partners. 2000 social housing households in Rochdale have been connected via the Mesh network, at an equivalent cost of 27p per household per month to fund.³⁴

Stakeholder workshop participants also described a new pilot initiative for a mesh network based in a community cafe in Edgeley, Stockport, enabling residents close to the cafe to connect to the wifi network for free. They suggested that Stockport Council is looking to pilot a second community mesh network.

Who can benefit:

Free wifi connectivity via a mesh network is valuable for people:

- Living in specific geographical areas;
- Facing affordability or other barriers to accessing mobile or fixed broadband connectivity.

Limitations

Mesh networks may face **scalability challenges**, due to the technical expertise and resource required to maintain the network infrastructure. For example, the Rochdale Mesh model has been described by some stakeholders as having a 'single point of failure' due to reliance on one actor for technical maintenance of the mesh infrastructure.

A **lack of funding** available for the installation of a mesh network has been a barrier to other areas adopting a similar model to Rochdale.

Who might miss out:

- People living outside of the specific geographical area covered by the mesh network
- People lacking skills or confidence to connect to the network.

Models supporting specific groups

Social housing tenants – multiple models of connectivity

Opportunities

Residents in social housing may face additional barriers to broadband connectivity; 28% of GM social housing tenants rely solely on mobile data, in contrast to 24% UK average.³⁵

Social housing pilot:

In 2022, the Social Housing Digital Inclusion Pilot was implemented through partnerships with five social housing providers across Greater Manchester and five internet service providers, with the aim of reaching up to 5000 social housing households with connectivity, across Bolton, Manchester City, Stockport, and Wigan.³⁶ Different models for connectivity were selected to be piloted across the areas, including:

- Social tariff for broadband for social housing households
- Free data sim packages for individual tenants
- Social tariff and connectivity for community spaces for six months plus digital skills support
- Broadband connectivity for residents and community spaces (planned, but not implemented)
- Reduced cost broadband connectivity plus digital skill support.

Unfortunately, uptake across all the connectivity offers in the pilot was low. However, the pilot provided useful learning in terms of the need to reconsider the affordability of social tariffs, the need for more capacity across social housing providers to work with ISPs around, and the need for resources to help tailor connectivity provision to the different needs of housing tenants.

Other models of free connectivity for social housing tenants:

Rochdale Mesh Network is an example of a community wifi model, where a fixed broadband connection is amplified to provide free civic wifi across two areas (College Bank and Falinge) to which people can connect with their own devices.³⁷ 2000 social housing households in Rochdale have been connected via the Mesh network, at an equivalent cost of 27p per household per month to fund.³⁸

Be One Homes in Bolton has provided free broadband access to social housing properties (including some connections installed in empty properties). Resident feedback has so far indicated fairly high satisfaction with the broadband provision, though some have expressed dissatisfaction with the reliability of the connection. Some residents have chosen to or are considering an upgrade to a (paid-for) better broadband package.³⁹

Other examples include provision by Stockport Homes of free wifi connectivity in communal areas in some of its social housing blocks.⁴⁰

Opportunities (cont.)

Other examples include provision by Stockport Homes of free wifi connectivity in communal areas in some of its social housing blocks.⁴⁰

Some residents have suggested a benefit to having the housing provider arrange provision of broadband connectivity (either for free or included in the rental cost) is that it removes the burden of exploring, understanding and selecting an appropriate contract which can be challenging.

“It’s free and it’s taking away the thinking about it” – Greater Manchester resident

Other models of low-cost connectivity for social housing tenants:

Stockport Homes has also enabled access to very low cost broadband for residents in three social housing blocks in Stockport, with stakeholders indicating there has been high levels of uptake. In this model, the broadband contract is negotiated outside of the tenancy agreement so residents are free to opt in or choose to go with another provider.

However, from community engagement discussions, there may be appetite among some social housing residents for broadband connectivity and its costs to be included in a tenancy agreement, as part of an ‘all bills included’ package, for example as is common in student accommodation. As with provision of free broadband in social housing, this has the benefit for residents of taking away the burden of having to set up or manage a contract. reported high uptake – accessed outside of tenancy agreement, so residents are free to choose to go with this or another provider; some appetite for provision of connectivity as part of rental package – included with all bills, as with student accommodation – taking away the burden of having to set up or manage a contract.

Who can benefit:

- People in social housing
- People who may find choosing a broadband package challenging or overwhelming.

Limitations

Due to infrastructure and technical reasons, existing models of free wifi in social housing may face **scalability challenges**, and therefore are only currently available in a few areas or buildings. For example, the Rochdale Mesh model has been described by stakeholders as having a ‘single point of failure’ due to reliance on one actor for technical maintenance of the Mesh infrastructure.

Limitations (cont.)

Building fabric may pose other infrastructural challenges for installing broadband to social housing, and / or to the reach and reliability of the connection for different households in the building. Resident feedback on the free broadband installation by Be One Homes in Bolton indicates that some people experience poor wifi signal in parts of their homes, and one resident indicated they have had to purchase a booster to improve the quality of the connection.⁴¹

Administrative and legal processes for the partnership between housing providers and internet service providers can cause long delays or even blockers to the installation of broadband, and can lead to considerable costs for both parties.

Residents in social housing may have concerns about accepting free connectivity that has been provided or arranged by their housing provider, due to **lack of trust**, or worries about **not having a choice** about providers and / or potential challenges with switching providers if they want a different connectivity package. Be One Homes reported considerable difficulty in persuading residents in the targeted properties to agree to free wifi connectivity, and of the 250 properties eventually connected, around 70 were vacant properties. Installing broadband connectivity in vacant properties and providing information on how to take up a broadband contract in a new tenancy 'welcome pack' may help overcome some of the challenge of resident reluctance or concern about installing connectivity.

Free connectivity via social housing providers may also be subject to **restrictions on what the connection can be used for**. For example, Stockport Homes states that it reserves the right to restrict usage of bandwidth-intensive sites, such as for gaming or streaming audio or video.⁴²

The **affordability** of even low-cost broadband contracts may be limited for some social housing tenants, particularly those for whom a social tariff is not affordable. Insights from the GMCA Social Housing Pilot⁴³ indicates residents are still struggling to afford broadband, even when the infrastructure is in place.

"[W]e gave you a wayleave for that building two years ago... but the people living in the building can't afford to buy a service. So it's great we've got fibre in the building, but the tenants can't afford to buy a service" – **Industry stakeholder**

Residents have expressed concerns about the potential for future price increases on contracts, and reluctance to be locked into multi-year contracts, given uncertain financial situations. Also, some residents may have concerns about the logistics of switching over from or canceling an existing broadband contract if they were offered the opportunity for a cheaper one through their housing provider, or if the cost of the cheap package increases.

"The first contract they may reduce money, the second or third... more money. And for you to go back, you know, it's it's not easy to change contract here" – **Greater Manchester resident**

Limitations (cont.)

Who might miss out:

- People who are in temporary accommodation or move frequently between social housing accommodation
- People with low trust in their housing provider or with concerns about a lack of choice
- People on low income but in private rented accommodation

Enabling initiatives

There are some initiatives in place across Greater Manchester that are aiming to address some of the barriers identified through the social housing pilot, and / or facilitate the provision of connectivity to social housing tenants.

Wayleave agreements

- Following the Greater Manchester Social Housing Pilot, the GM Wayleaves Agreement was established, through a partnership with internet service providers and housing providers, to create a standardised process for removing barriers to installing broadband in social housing.⁴⁴
- The agreement has the potential to facilitate broadband access for 260,000 social housing tenants, by reducing administrative and legal burdens for all parties, and reduce rollout costs for internet service providers.
- However, despite the standardised agreement, stakeholder perceptions suggest it can still take **a long time to implement** and install broadband in social housing, particularly if providing digital connectivity is not a priority for the housing provider.

Smart housing projects in social housing

- The installation of smart technology in social housing can bring together potential benefits for public services through real-time monitoring for example for social care provision or housing maintenance, and for residents through the installation of connectivity required for the smart tech to function.
- The Connected Homes Inclusive Places programme (CHIPs) in Greater Manchester is establishing a framework for the use of smart systems in social housing to improve quality of life and quality of housing stock.⁴⁵ These systems, including damp and mould sensors, care-assisted technology and alarm systems, require connectivity, and therefore, create opportunities for installation of broadband in homes, facilitated by housing providers. GMCA is advocating for social housing providers to provide free or discounted broadband connectivity as part of the programme.

Enabling initiatives (cont.)

- However, there is a potential challenge of a **lack of acceptability** for some residents about accommodating smart home technology in their properties in return for low-cost broadband. Residents have expressed **concerns about being 'monitored'** by their housing provider or other services, through the smart technology, and concerns about the **hassle of arranging for someone to come in to fit** and / or fix a device, based on previous poor experiences. There also seemed to be some **lack of understanding** of how the technology would work and its purpose.

"It is intrusive. You don't want microphones in these things. Why would you want to [monitor]? Just fix it" – Greater Manchester resident

People seeking employment – financial support for connectivity

Opportunities

In 2021, TalkTalk partnered with DWP to deliver a pilot in Greater Manchester offering 6 months of free, superfast broadband (with unlimited usage) to people seeking work. This was delivered via Job Centre Plus work coaches, who would provide voucher codes to eligible jobseekers to use to pre-pay for the six month contract, with costs covered through the **Flexible Support Fund**.⁴⁶ This initiative was subsequently rolled out across other regions in the UK.⁴⁷

Who can benefit:

- People who meet the eligibility criteria for the funds
- People who are already seeking support from public or community services

Limitations

There may well be a **lack of consistency** across local authorities in Greater Manchester in whether and how these funds are being used to support residents struggling to afford digital connectivity. Support may also be limited by the time, capacity and awareness of front-line staff to explore connectivity needs of residents and whether they would be eligible for support through a fund.

Support through the Flexible Support Fund is intended to be **short-term**, and therefore may not offer a sustainable solution to people struggling to afford digital connectivity.

Who might miss out:

- People who are not eligible for support through these funds, eg people with no recourse to public funds
- People who lack trust or confidence to engage with formal support services

People facing financial crisis – financial support for connectivity

Opportunities

The **Crisis and Resilience Fund** (replacing the Household Support Fund) can be used to support people experiencing a financial shock or who cannot afford essential costs. While there isn't much information available about how (or if) this fund is being used by local authorities in Greater Manchester to support people with costs of connectivity, there are examples of it being used to support people to purchase digital devices, to ensure they have online access to essential services.

For example, Stockport Council works with trusted community partners (such as Disability Stockport), providing them with budget from the Fund and autonomy around decision-making, enabling them to use the support to meet digital needs of their clients, such as to purchase devices.

Who can benefit:

- People who meet the eligibility criteria for the funds
- People who are seeking support from public or community services

Limitations

There may well be a **lack of consistency** across local authorities in Greater Manchester in whether and how these funds are being used to support residents struggling to afford digital connectivity. Support may also be limited by the time, capacity and awareness of front-line staff to explore connectivity needs of residents and whether they would be eligible for support through a fund.

Support through the Crisis and Resilience fund is intended to be short-term, and therefore may not offer a sustainable solution to people struggling to afford digital connectivity.

Who might miss out:

- People who are not eligible for support through these funds, eg people with no recourse to public funds
- People who lack trust or confidence to engage with formal support services

People in temporary accommodation – free personal wifi connectivity

Opportunities

In Trafford, Jangala partnered with a local VCSE organisation, St. John's Centre, to pilot the distribution of 'Get Boxes' (personal mifi connectivity) to people in temporary accommodation, including asylum seekers and students.⁴⁸

This support has enabled people and others in their household to access key services online, even with no recourse to public funds, and when being frequently moved to different accommodation.

Who can benefit:

- People in temporary accommodation
- People with no recourse to public funds

Limitations

Get Boxes are reliant on free mobile data, and therefore may be subject to limitations relating to monthly data allowances. Jangala's pilot providing Get Boxes to people in temporary accommodation in Coventry saw 43% of users **running out of their 25GB monthly data allowance** before the end of the month. The allowance lasted an average of 13 days.⁴⁹ If Get Boxes are an option for enabling more people in a household to access connectivity, this limited data allowance may pose an additional challenge.

Mobile coverage and strength of mobile signal will also shape the effectiveness of this model. One Greater Manchester resident who had received a Get Box said it wasn't useful for him as there wasn't sufficient mobile signal to his basement flat:

"It was a box... but because you're in the basement, [the] Wi-Fi just didn't work"
— **Greater Manchester resident**

There may also be additional challenges with **setting up and maintaining or fixing** Get Boxes or similar technology, with residents potentially requiring additional support from community partners.

Who might miss out:

- People living in areas or accommodation with poor mobile signal
- As an alternative to fixed broadband, people living in larger households may find the data allowance runs out quickly

Care leavers – free mobile connectivity

Opportunities

The **Greater Manchester Care Leavers Guarantee** was established after a successful pilot, in recognition of the estimated 4200 care leavers aged 25 and under, across the region. A formal commitment to young people aged 16 to 25 leaving care, made by all 10 local authorities in the region, with other partners.⁵⁰ The Guarantee recognises the additional financial and social challenges that young people leaving care can face, and pledges access to a range of support, including access to 12 months free digital connectivity – typically via Databank – plus a digital device and skills support.

This is framed within the Guarantee as part of support to help young care leavers ‘get ready for work’, and support is delivered via existing council or community services.

Who can benefit:

- Care leavers aged 16 to 25 who meet the eligibility criteria

Limitations

There may be **limited awareness** of the digital connectivity support available among care leavers themselves, and the support may not be consistently understood or offered by those supporting care leavers across the region. At the time of writing, the link to the application form for the digital support in the information leaflet is broken, which suggests that the process for accessing the support may not be very easy to navigate for all.

The effectiveness of the connectivity offered under the agreement will be subject to similar limitations as for Databank, in terms of a lack of longer-term sustainability; potential challenges with the amount of monthly mobile data available, and also subject to mobile signal challenges.

Who might miss out:

- Care leavers who lack awareness or understanding of how to access support

Models supporting individuals

Free mobile data through the Greater Manchester Databank

Opportunities

The Greater Manchester Databank, via the National Databank, can provide adults on low income with free mobile data SIMS / vouchers for up to 12 months.

As of September 2026, there are **333 registered Databanks**, and over **70,000 SIMs / mobile data vouchers** have been issued to residents since April 2022.⁵¹

People can be provided with free data at the point-of-need via a wide range of organisations including front line council services, libraries, foodbanks, family hubs, social housing providers, and a range of community organisations.

Receiving a SIM through the Databank can also help people have access to a greater amount of mobile data than they would otherwise be able to afford to pay for, and reduce reliance on insecure public wifi connections.

"Since the new SIM card I don't need public WiFi as much" – Greater Manchester resident

There are also regional examples of integrating the Databank offer into broader digital support. In Wigan, the Access for All programme provides residents aged 18+, on a low income, with access to 6 months' free mobile data via the Databank, plus a refurbished digital device and digital skills support.⁵² Referrals are made through a range of council and community partners, including members of Wigan's Digital Communities Partnership. The programme has been funded in part through DSIT's Digital Inclusion Innovation Fund.

Who can benefit:

Free mobile data via the Databank is valuable for people:

- in temporary accommodation or experiencing homelessness who cannot access a fixed broadband connection;
- with no recourse to public funds;
- facing affordability or other barriers to accessing mobile or broadband connectivity.

"I find that it's costly on pay as you go. So, [data through Databank] is quite convenient" – Greater Manchester resident

Limitations

Free data is **only available for up to 12 months**, which may not be enough time for people to find other ways to afford mobile or broadband connectivity. Residents who have received free data through the Databank have concerns about how they will access the internet once they come to the end of their 12 month provision.

"It's free data but maybe next month it's finished" – **Greater Manchester resident**

If data through the Databank is the only source of connectivity, some people **struggle to manage with the monthly data allowance**, and can find themselves running out of data before the end of the month or having to restrict their online activity.

Awareness and understanding of the Databank service may not be consistent across front-line services, in terms of how to access free data and who is eligible. Staff may struggle to find time to explore with clients if Databank is a suitable option for them in appointments, or to signpost them to a Databank service.

The Databank model **relies on donations of data** from telcos, and often **unfunded delivery** by VCSE organisations.

"The National Databank is supporting hundreds of thousands of people... I know that is a heavy lift on your community organisations to deliver that" – **Industry stakeholder**

Who might miss out:

- People who are not used to accessing support services or who mistrust council or other support services.
- People who lack access to broadband connectivity, meaning the free data allowance may not be sufficient for their needs.
- People without broadband connectivity who live in an area with poor mobile signal.

"They put this block paving outside my house... You cannot get signal [now]. It's really bad... I always say if you need me, don't ring me..."
– **Greater Manchester resident**

Free wifi through 'Wifi in a Box'

Opportunities

'Wifi in a box' models, including mifi and Jangala's 'Get Boxes' are models where mobile data is used to provide a wifi connection, for use in the home. It has been identified as a sustainable and scalable option for providing quick access to connectivity for people on low income.⁵³ Get Boxes typically rely on free mobile data provided through the National Databank.

In Greater Manchester, Get Boxes have been distributed via a pilot programme in Trafford in 2024 – 2025, working with community partners to provide around 40 Get Boxes to people experiencing homelessness and older people, via the Ageing in Place Pathfinder. Bury Council also distributed over 50 Get Boxes in 2024, prioritising refugees, asylum seekers and care leavers.

Other examples include the provision of wifi 'dongles' through the Stockport Lending Library.

Who can benefit:

Free wifi through wifi in a box models is valuable for people:

- On low income, living in households with children or multiple adults
- People in temporary or unstable accommodation who may not be able to access a fixed broadband connection

Limitations

As Get Boxes are reliant on free mobile data SIMs from the National Databank, this model is subject to **similar limitations as for the Databank model**, including a limited data allowance, dependency on mobile coverage and strength of signal, and the limited long-term sustainability.

The evaluation of Jangala's 2025 pilot programme in Coventry, providing Get Boxes to residents in temporary accommodation, saw 43% of users running out of their 25GB monthly data allowance before the end of the month. The allowance lasted an average of 13 days.⁵⁴ If Get Boxes are an option for enabling more people in a household to access connectivity, this limited data allowance may pose an additional challenge.

One Greater Manchester resident who had received a Get Box said it wasn't useful for him as there wasn't sufficient mobile signal to his basement flat:

"It was a box... but because you're in the basement, [the] Wi-Fi just didn't work."

— **Greater Manchester resident**

Limitations (cont.)

There may also be additional challenges with **setting up and maintaining or fixing** Get Boxes or similar technology, with residents potentially requiring additional support from community partners.

Who might miss out:

- People living in areas or accommodation with poor mobile signal
- As an alternative to fixed broadband, people living in larger households may find the data allowance runs out quickly.

Low cost broadband and / or mobile data through social tariffs

Opportunities

Social tariffs offer discounted pricing plans for broadband and / or mobile connectivity, typically available to people on low income who are claiming certain benefits, and plans typically range from £10 to £24.⁵⁵ They may provide a more sustainable connectivity option for people on low incomes, for example as an alternative or follow-on to free data via the Databank.

In the Greater Manchester Social Housing Pilot, a social housing provider in Bolton worked with Hyperoptic to promote take up of a range of social tariffs for broadband among tenants. There was very little take up of the social tariff packages between £15 and £25, but more interest among tenants in the £5 per month 'special offer'.⁵⁶

While take-up of social tariffs by those eligible has been low at a national level,⁵⁷ there are recommendations from work across social tariffs in different sectors for increasing uptake, including auto-enrolling eligible people onto social tariffs and embedding registration into existing benefits calculator tools, such as the Better Off calculator.⁵⁸

Salford City Council provides information about social tariffs as part of its signposting to resources for digital inclusion for residents.⁵⁹ Community support through housing providers have also signposted residents to social tariffs. Residents have indicated that targeted communications and a smooth process for signing up to a social tariff can be a positive experience, resulting in more affordable connectivity:

"I was paying £25 a month... And what happened was I missed one payment... and they didn't listen to me, said if I'm going to pay in 14 days, they wouldn't have it. They cut it off. So a leaflet comes through the door for EE, and because I was on universal credit or on any type of benefit I got it for 16 quid... So I'm only paying £16 a month... it's ideal... EE were the only ones who mentioned about this social tariff... and I can't fault them" — **Greater Manchester resident,**

While most social tariffs are available only to people receiving certain benefits, outside Greater Manchester there is an example of a social tariff available to all. CommunityFibre, a London-based network, offers a broadband social tariff for £12.50/month with no eligibility criteria.⁶⁰

Who can benefit:

- People on Universal Credit or receiving other eligible benefits.

Limitations

There is widespread recognition that social tariffs are **not well understood** and those who might be eligible **may not be aware** of them. Ofcom reports awareness of broadband and mobile social tariffs among only 30% of eligible households, nationally.⁶¹ This lack of awareness has also been identified across Greater Manchester too, by stakeholders working to support digital inclusion, and demonstrated in through community engagement conversations.

Social tariffs may also be **too expensive** for people on low income. The 2023 GMCA Social Housing Pilot found that social tariffs at £12 – £20/month did not meet the financial needs of tenants; true affordability for people in these demographic groups was closer to £4 – £8/month.⁶²

Some residents may **lack confidence and / or trust** in relation to entering into a new contract, due to concerns about future changes to personal financial situations making a contract unaffordable; about potential future prices on contracts; and about understanding and managing the process for changing contracts if they decide they want to switch provider.

"I [am] very scared about this yearly contract. Most of the contracts, they're like yearly, 2 years, and I said, "Oh, I'm on credit. Anything can happen" –

Greater Manchester resident

There may also be a **perception** that broadband or mobile connectivity provision through a social tariff (or other discounted package) may be of **lower quality or speed**. The 2023 GMCA Housing Pilot also identified that 88.2% of eligible, offline social housing tenants were not interested in taking up a social tariff, though the specific reasons for this lack of interest are not detailed.

"The cheaper the contract... the worse the internet and the more you're paying for it the stronger it is." – **Greater Manchester resident**

Who might miss out:

- People who are on low income but not receiving eligible benefits, such as asylum seekers

Signposting to digital support

Opportunities

There are examples in some local authorities of specific resources and processes set up to help signpost residents to digital support (including connectivity) where needed. Salford City Council's digital triage tool [The Digital Help Finder](#) is a localised resource, launched in 2024, and is designed to identify residents' needs in relation to digital and signpost them to relevant support that is local to them. It can be used by residents directly, or by front-line staff or community organisations supporting residents. Salford Council estimate that it saves over 26 hours per week of staff time on face-to-face services.⁶³

A simpler signposting resource is Stockport Council's [free wifi mapping site](#) which specifies which wifi connections are completely free across the borough, and for which you need to purchase something to be able to connect.

Who can benefit:

- Any resident in the relevant boroughs

Limitations

Awareness of the information and signposting resources available may be inconsistent within boroughs, and it may not be possible for some residents to access the information directly if they do not already have an internet connection (eg Stockport's list of free wifi connections).

Who might miss out:

- People who are unaware or unable to access information about resource
- People who lack trust or do not engage with council services

Learning From other models beyond Greater Manchester

Looking beyond Greater Manchester, we can find examples of models being implemented in other places, or existing at a national level. Drawing on the learning from these, we have identified opportunities for piloting new initiatives in Greater Manchester.

Models in place beyond Greater Manchester

Place	Groups	Individuals	System-wide
1. Expanded free broadband in public places	1. People in temporary accommodation 2. Social housing tenants: building the case for 'invest to save'	1. Fixed wireless access / 5G broadband	1. Zero-rated websites

Expanded free broadband in public places

Opportunities

Examples from other cities show possibilities for extending the availability of public wifi across Greater Manchester, as a single, connected network that would not require separate sign-in, as people move about the region.

In Newcastle, their wifi model utilises a unified, public-private partnership with Purple to deliver a city-wide network where users register once via an app to roam across public venues, local businesses and public outdoor space.⁶⁴

Sunderland's model relies on a 20-year partnership with Boldyn Networks to deliver free, high-speed public wifi, integrated with a city-wide 5G and Internet of Things infrastructure network.⁶⁵

Through community discussions, residents highlighted the value of expanding free public wifi in Greater Manchester, particularly for people who currently prioritise paying for wifi at home over mobile data, but need internet access outside the home too:

Opportunities (cont.)

"I have in the home Wi Fi, but I need outside also... I need two locations. It would be useful" – **Greater Manchester resident**

Residents also emphasised that to improve on the current free wifi provision in public places in Greater Manchester, any expanded networks should avoid website restrictions, such as those currently in place in some libraries.

Who can benefit:

- People who cannot afford mobile data or enough data to meet their needs
- People who cannot easily access existing public spaces with wifi

Limitations

An expanded network may still be subject to existing concerns among residents about the **safety and security** of using public wifi, with some people restricting their use of public wifi for certain, 'low risk' tasks online. Some people with low digital skills or confidence may feel **unsure about how to connect** to a public wifi network, without support.

Residents indicated **trust barriers**, suggesting that even if expanded public wifi badged as "secure" and/or officially linked to GMCA, they may be reluctant to use it for important activities:

"Well, how secure is it if things get hacked? Do you know what I mean? Somebody will find a way" – **Greater Manchester resident**

Who might miss out:

- People with low digital skills or confidence to connect securely

People in temporary accommodation – different models of connectivity

Opportunities

In several locations there are examples of initiatives focused on supporting people in temporary accommodation with connectivity, acknowledging the barriers they will face to establishing fixed broadband connections at home.

Free wifi:

Free wifi is provided in temporary accommodation provided through Islington and Barking and Dagenham hostels, while in Camden, free wifi is provided in hostels directly managed by the council.⁶⁸

Personal connectivity:

In Coventry, a pilot initiative by Jangala involved the provision of 200 'Get Boxes' to people living in temporary accommodation. This enabled people to connect to core services and also led to some delivery partners being able to make the case for investing in the installation of wifi in temporary accommodation premises, beyond the pilot.⁶⁹

Greenwich Council, in partnership with a local VCSE organisation, provides free mobile data sims to people in temporary accommodation.

Who can benefit:

- People living in temporary or insecure accommodation

Limitations

The models may be limited by the specific limitations of the mode of connectivity, as described above. For models using 'Get Boxes' or free mobile data, these may be limited by **monthly data allowances**, which may not be sufficient to meet the needs of the users.

Poor mobile coverage or signal in certain locations or due to building infrastructure may also limit the value of models relying on mobile data.

Who might miss out:

- People living in areas or accommodation with poor mobile signal
- As an alternative to fixed broadband, people living in larger households may find the data allowance runs out quickly.

Building the case for 'invest to save' for connectivity in social housing

Opportunities

Building on the model of smart home technology for enabling connectivity in social housing, there are examples outside Greater Manchester that are building evidence of the cost savings from investing in free broadband for tenants.

CityFibre has proposed a "spend to save" model where the cost of providing free tenant broadband is subsidised by the savings generated from installing IoT smart home monitoring (e.g. damp, mould, and energy efficiency sensors) on the same network.⁷⁰ CityFibre are undertaking a phase one demonstrator pilot initiative in York to generate real-world evidence for the 'spend to save' model. By prioritising connecting the homes of people who are high users of council and other services (such as the NHS), they hope to demonstrate the cost savings to public services from facilitating people's access to connectivity, through which services and support can be provided remotely.

An earlier example of this is in 2019, Liverpool 5G Health and Social Care Testbed's pilot in 2019 to install a private 5G mesh network, combined with smart health tech in a deprived neighbourhood in Liverpool. Although the connectivity was used only to enable the health tech to function, and not for residents' personal use, they saw a range of health and social benefits, including reduced medicines mismanagement, decreased loneliness, boosted telehealth and reduced hospital admissions. They estimated that implementing this work could see a £247,688 saving per 100 users.⁷¹

Who can benefit:

- People living in social housing
- People who are high users of health and social care services

Limitations

It may **take time to build sufficient evidence** for a business case that is compelling to public services, and there may be challenges in **identifying how the initiatives are to be funded**, and by which service(s).

As detailed above, the model may then be subject to the limitations of residents' lack of trust or unwillingness to have smart tech installed in their home, and potential concerns about lack of choice of internet provider.

Who might miss out:

- People on low income who are in private rented accommodation

Fixed Wireless Access / 5G Broadband

Opportunities

Options for home broadband that use mobile signal rather than fixed infrastructure, such as via Vodafone's '5G Broadband' technology,⁷² are an option for enabling broadband connectivity in places where installing cabling is not possible. Stakeholders have identified the potential value of this for residents living in temporary accommodation or in other places where there are infrastructural barriers to installing a connection:

"I think that's a fantastic solution because I don't have to put infrastructure in the ground. I can put the power hub in and that solves a massive tick box around having infrastructure." — **Industry stakeholder**

Who can benefit:

- People living in temporary accommodation
- People living in social housing or private rental where they lack permission to establish a broadband connection

Limitations

The **cost of connectivity** via fixed wireless access or 5G broadband is likely to be the biggest barrier – the Vodafone 5G Broadband package starts at £21 per month. There may also be a **lack of awareness** of this technology among residents and among community or other services providing digital inclusion support and advising residents on their options for connectivity.

Who can miss out:

- People on low incomes
- People with a lack of understanding or lack of confidence about taking up a new type of connectivity option

Zero-rated websites

Opportunities

Zero-rated websites enable people to access certain websites without using up mobile data. Telcos already offer zero-rated websites for some key services, enabling people on their network to connect with these websites for free, for example NHS, charity websites and advice services. Zero-rating occurs at the domain level, and therefore is not restricted to specific regions.

Expanding the range of zero-rated websites would enable people to engage with more online services without using up mobile data. It could also include establishing and even mandating a list of defined public services that must be zero-rated by all providers, as recommended by the Digital Poverty Alliance.⁷³

Who can benefit:

- People with mobile connectivity who struggle to manage their data allowance

Limitations

Currently, zero-rated websites are not mandated and not consistent across providers. Awareness of which websites are zero-rated by which providers may be limited, and may not be well understood, particularly among people with low digital skills or confidence.

There could be considerable technical challenges with expanding zero-rating for example across .gov websites.

Who can miss out:

- People who lack awareness or understanding of how to benefit from zero-rated websites

Imagining other possible models

Beyond models that are already in existence – in Greater Manchester and elsewhere – there are other potential opportunities that could be explored to assess their feasibility and effectiveness in the region.

Other ideas and opportunities for addressing data poverty

Discount for broadband packages, e.g. Connected Homes Discount

Opportunities

Citizens Advice (and others) have recommended creating a new voucher, modelled on the Warm Home Discount, to make broadband more affordable.⁷⁴ This 'Connected Homes Discount' voucher could be made available to people on low income, including those for whom social tariffs are not available. A suggested £10 per month discount voucher would provide £120 per year saving per household, and if cross-subsidised through industry, would add approximately £5 per year to each household bill (for those paying for full-price broadband). The recommendation is for the discount to be applied automatically to eligible household bills, to avoid some of the barriers to take-up as seen with social tariffs.

Through the community engagement discussions, residents indicated that any kind of discount on connectivity would be welcome amid rising costs.

"In this day and age we are all struggling... and one of the struggles is the bills... if you get a discount, that would be great" – **Greater Manchester resident**

Who can benefit:

- People on low income who meet any specified eligibility criteria

Limitations

Even with a £10 discount, there may still be **affordability barriers** for residents on very low incomes. Residents expressed concern that a discount would not be sufficient to make a broadband package affordable for them, particularly if the discount could only be used on standard / higher-priced packages (i.e. not applicable to social tariff rates). There were also a few concerns about whether receiving a discount could affect entitlement to other benefits, highlighting need for clear information and / or support around accessing the discount:

"Any favour that you do for me, saving money here... the job centre can affect it [it can affect my benefits]." – **Greater Manchester resident**

Limitations (cont.)

Some residents expressed concerns about how the discount would be administered, and were worried about **challenges with accessing or using the voucher each month**, if it was not automatically applied. Some also indicated they would be suspicious of receiving an offer for a discount, **fearing that it could be a scam**.

The take-up of this model would also be subject to **other limitations around entering a contract for broadband** as described above, relating to concerns about committing to multi-year contracts, and challenges with establishing fixed broadband in certain types of accommodation.

Among wider stakeholders, there are concerns about **how the discount will be financed** – subsidised by ISPs and / or their customers, or via the taxpayer – and questions about how the discount would relate to existing social tariffs, which are already provided at a loss by ISPs.

"A discount voucher, is that essentially just making social tariffs cheaper? And actually [social tariffs] are not something that we are making money off of... they're run kind of beyond lean at the moment" – Industry stakeholder

Who might miss out:

- People who cannot afford a broadband contract, even with a discount
- People who have trust or other concerns about entering into a broadband contract
- People living in temporary accommodation or without permission to install fixed broadband

Other policy levers

There are a range of other policy levers that could be engaged to help embed access to connectivity across the wider system.

Housing policy levers:

- Expectation for provision of broadband connectivity in social housing could be built into housing commissioning policy. For example, Trust for London has campaigned for local authorities to guarantee free, reliable Wi-Fi for everyone in temporary accommodation.⁷⁵
- Greater Manchester's Good Landlord Charter⁷⁶ is an initiative developed to improve and assure standards for accommodation in the private rental and social housing sectors. Currently, over 250,000 homes are represented by a Good Landlord Charter supporter. The Charter does not currently include any standards for provision of connectivity, but this could be developed and included, to motivate landlords to provide or enable installation of suitable broadband connectivity.

Health policy levers:

- The strategic shift at the national level towards 'neighbourhood health'⁷⁷ offers further opportunities to integrate connectivity support into initiatives to improve access to health services. Building on the Live Well and Prevention Demonstrator initiatives in Greater Manchester, there will likely be more opportunities to embed digital access into the delivery of health, care and wellbeing provision across the region. Close collaboration between NHS, social care and VSCE stakeholders will be required to identify potential funding and policy levers to enable this.

Conclusions

Without affordable internet many people – in Greater Manchester and nationally – are excluded from access to key services, support and opportunities. The evidence and insights summarised in this report illustrate the range of mechanisms and approaches that can be adopted at a place-based level to increase access to low-cost or free connectivity, together with their strengths and limitations. For Greater Manchester, specific recommendations for addressing data poverty in the region have been presented in the five-year roadmap for action.

This discovery project, combining desk research, stakeholder workshops and community engagement, has generated key learning about what is needed to address data poverty (and promote digital inclusion more widely) at a regional or local level:

- **Sustained engagement and commitment to action** by a range of stakeholders, including local authorities, social housing providers, NHS partners, industry partners and the VCSE sector.
- **Making the most of existing funding mechanisms and place-based initiatives**, such as the Crisis and Resilience Fund, neighbourhood health programmes, social housing commissioning processes.
- **Baking digital inclusion into the design and delivery of services**, especially in areas such as social housing, cost-of-living support, community-based provision and the commissioning of support for priority groups.

There are also limits to what can be achieved without national, systemic change. Action and policy change beyond local and combined authority levels is also urgently needed, with Good Things Foundation and other organisations proposing innovative ideas for change at the national level (e.g. a ‘Connected Homes’ discount, removing VAT on social tariffs, zero-rating NHS services).^{78 79 80 81} National policymakers need to convene and collaborate with the telecoms industry, civil society, regulator, and strategic authorities to address this challenge.

Building on existing evidence of solutions for reducing data poverty,⁸² the focus on Greater Manchester Combined Authority provides a blueprint of what can be done at a local level to help make internet connectivity more accessible and affordable. Together with national-level commitment and action, data poverty can be addressed for all citizens, helping ensure everyone can access key services and participate in our digital society.

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VodafoneThree

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Appendix

Below is an analysis of household digital costs using current ONS Living Costs and Food survey data (2023 – 24), with a focus on Greater Manchester, conducted by Prof. Simeon Yates.

GMCA digital affordability – synthetic estimates using OAC and MRP

Simeon Yates

2026-07-23

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1 How this report estimates GMCA figures

This is a short report on affordability of digital access in GMCA. It needs to be read alongside the **Analysis of household digital costs using current ONS Living Costs and Food (LCF) survey data (2023-24)** as it uses the measures and groupings identified in that report. However the 2023-24 LCF public data file that the National Analysis of Household Digital Costs report is based on does not identify Local Authority for each respondent. Therefore, a direct simple “filter of GMCA respondents” in the data is not possible. Even were this possible using other geographic data, the number of cases would likely be less than 150. This makes doing a direct statistical analysis from the survey problem-atic. However, the data file does contain the Output Area Classification (OAC) for all respondents. We can use this to better estimate GMCA figures and map them. To calculate the estimates we can use two compatible but different approaches and then compare the results as a reliability check:

- **OAC-based synthetic estimation.** For each outcome, compute the LCF-based national mean within each 2011 OAC subgroup, then weight those subgroup means by GMCA’s actual OAC composition (using a postcode lookup against GMCA LSOAs). This is the same machinery the existing mapping section already uses for choropleths, applied here to produce headline numbers.
- **Multilevel post-stratification (MRP).** Fit a multilevel logistic regression on the national LCF for each outcome — fixed effects for household demographics, random intercepts for government regions and OAC subgroup — then post-stratify to a GMCA demographic frame.

Both methods are implemented below so the GMCA estimates can be cross-checked. They should give similar headline numbers.

OAC-based synthetic estimation runs end-to-end on the data already in LCF file. MRP also runs end-to-end but the post-stratification frame is *synthesised* from GMCA’s OAC composition projected through the national LCF’s within-OAC demographic distributions (i.e. it assumes GMCA’s demo-

graphic mix within each OAC subgroup matches the national LCF distribution within that subgroup¹). The analysis uses the same set of measures as the **LCF report**:

- Internet costs $\geq 3\%$ of income (online households)
- Total telecoms $\geq 3\%$ of income (all households)
- Social tariff $\geq 3\%$ of income (all households)
- Low-Income Low-Internet (mobile-only + poverty)
- Cohort C — Groups 2 & 5 (can't afford social tariff at $<3\%$)
- Group 1 — online and can afford social tariff or better

key	outcome_var	filter_expr	label
DCI_3	DCI_3_numeric	a172p == 1	Internet costs $\geq 3\%$ of income (online households)
CCI_3	CCI_3_numeric	NA	Total telecoms $\geq 3\%$ of income (all households)
ST_3	ST_3_numeric	NA	Social tariff (£5/wk) $\geq 3\%$ of income (all households)
LILI	LILI_numeric	NA	Low-Income Low-Internet (mobile-only + poverty)
in_cohort_C	in_cohor	t_C	Cohort C — Groups 2 & 5 (can't afford social tariff at $<3\%$)
in_group_1	in_group_1	NA	Group 1 — online and can afford social tariff or better

2 OAC-based synthetic estimation

This approach has 4 steps:

1. For each outcome, compute the LCF national proportion (or mean) within each OAC 2011 subgroup (oac3d). These are the “subgroup means”.
2. Build the OAC composition of GMCA by filtering by postcode lookup to GMCA LSOAs and counting OAs per OAC subgroup.
3. The GMCA estimate of the outcome is the weighted sum of subgroup means using the GMCA OAC composition as weights.
4. Confidence Intervals (CIs) gives the range of values around the estimate that we are 95% confident of. This comes from a statistical ‘bootstrap’ process that resamples the full LCF respondents within each subgroup 200 times and recomputes the post-stratified estimate.

GMCA OAC composition: 74 distinct OAC subgroups, 115468 postcodes, filtered on lad25cd

2.1 OAC-based synthetic estimation — headline GMCA estimates

OAC-based synthetic estimation — GMCA synthetic estimates (OAC post-stratification)

95% CIs from a B = 200 bootstrap that resamples LCF respondents within each OAC subgroup

Outcome	GMCA estimate	UK estimate	Difference (pp)
Internet costs $\geq 3\%$ of income (online households)	18.7% (17.2–20.4)	18.0% (16.8–19.3)	0.7
Total telecoms $\geq 3\%$ of income (all households)	41.1% (38.7–43.3)	38.2% (36.4–39.8)	2.9
Social tariff (£5/wk) $\geq 3\%$ of income (all households)	3.9% (3.1–4.7)	3.4% (2.8–4.0)	0.5
Low-Income Low-Internet (mobile-only + poverty)	2.8% (1.9–3.7)	2.0% (1.5–2.5)	0.8
Cohort C — Groups 2 & 5 (can't afford social tariff at $<3\%$)	4.7% (3.6–5.7)	3.9% (3.2–4.7)	0.8
Group 1 — online and can afford social tariff or better	85.0% (83.6–86.8)	87.0% (85.9–88.0)	-1.9

¹A more robust method would be to use Census data for the synthetic post-stratification stage. However, this would require a significant reworking and likely not lead to additional information unless the two methods diverged greatly, which, as we will see later, they do not. An in-depth national-regional comparative analysis might take this route.

Reading. The headline pattern for GMCA is consistent: GMCA is **a few percentage points more affordability-stressed than the UK average on every outcome**, and a few percentage points lower on the “everything is fine” Group 1 measure.

- **DCI 3% (online): 18.7% (17.2–20.4) vs UK 18.0%.** A 0.7pp shift — small but a real signal.
- **CCI 3% (all telecoms): 41.1% (38.7–43.3) vs UK 38.2%.** The largest GMCA–UK gap in the table at +2.9pp. Total telecoms burden — which combines the mobile, landline and combined-bill spend — is materially higher in GMCA than nationally. This is consistent with GMCA’s higher mobile-only share and lower relative incomes feeding into the calculation.
- **Social tariff 3% (all): 3.9% (3.1–4.7) vs UK 3.4%.** The “basic social tariff is unaffordable” floor measure is half a point higher in GMCA. Small in pp terms but ~15% higher in relative terms.
- **LILI: 2.8% (1.9–3.7) vs UK 2.0%.** GMCA has **40% relatively more LILI households** than the UK average — the policy-most-vulnerable group is materially over-represented.
- **Cohort C: 4.7% (3.6–5.7) vs UK 3.9%.** ~21% relatively more GMCA households are in the “can’t afford a social tariff at <3%” cohort that drives the main report’s policy conclusions.
- **Group 1: 85.0% (83.6–86.8) vs UK 87.0%.** The mirror of the rest — 2% fewer GMCA households sit in the comfortably-online tier.

The CIs are tight (typically ± 1.5 pp on the headline outcomes) and exclude the UK average on three of the six outcomes (CCI 3%, LILI, Group 1).

OAC-based synthetic estimation — extrapolated GMCA household counts
Applied to GMCA total of 1,180,000 households

Outcome	Implied GMCA households	Implied GMCA hh (lo)	Implied GMCA hh (hi)
Internet costs $\geq 3\%$ of income (online households)	221,100	202,500	240,800
Total telecoms $\geq 3\%$ of income (all households)	484,800	456,900	510,500
Social tariff (£5/wk) $\geq 3\%$ of income (all households)	46,400	36,500	56,000
Low-Income Low-Internet (mobile-only + poverty)	32,900	22,600	43,100
Cohort C — Groups 2 & 5 (can’t afford social tariff at <3%)	55,800	43,000	67,100
Group 1 — online and can afford social tariff or better	1,003,500	986,800	1,024,600

Reading. Applied to the GMCA household total of 1.18m, the headline numbers translate into:

- **~485,000 households** with total telecoms $\geq 3\%$ of income (the broadest affordability stress measure).
- **~221,000 households** with internet costs alone $\geq 3\%$ of income.
- **~221,000 households** with internet costs alone $\geq 3\%$ of income.
- **~56,000 households** in Cohort C — the policy-most-vulnerable cohort.
- **~46,000 households** for whom even a basic social tariff would breach 3% of income.
- **~33,000 households** in the LILI sub-group (mobile-only and in poverty).

As an example of a policy intervention a £13/month voucher applied to Cohort C, the GMCA-scale cost would be roughly $\text{£}56\text{k} \times \text{£}13 \times 12 = \text{£}8.7\text{m per year}$, with a 95% CI of about £6.7m–£10.5m. This is the GMCA-scale equivalent of the £63m/year national figure quoted in the main report’s conclusions.

3 Multilevel post-stratification (MRP)

A multilevel logistic regression is fit on the **national** LCF for each outcome:

- Fixed effects: income quintile, in poverty, and relieving benefits.
- Random intercepts: 12 Government Regions and OAC subgroups.

The model is then used to predict the outcome probability for each cell of a GMCA post-stratification frame. The frame here is **synthesised** from GMCA's OAC composition projected through the national LCF's demographic distribution within each OAC subgroup (however see²).

Post-strat frame: 701 cells, total weight = 1.0000

MRP – GMCA MRP estimates

Multilevel logistic on the national LCF, post-stratified to a synthesised GMCA frame

Outcome	GMCA estimate (E)
Internet costs ≥ 3% of income (online households)	20.7% (19.6–22.2)
Total telecoms ≥ 3% of income (all households)	41.9% (39.8–43.4)
Social tariff (£5/wk) ≥ 3% of income (all households)	3.4% (12.9–81.8)
Low-Income Low-Internet (mobile-only + poverty)	2.1% (2.2–79.7)
Cohort C – Groups 2 & 5 (can't afford social tariff at <3%)	4.0% (13.2–82.5)
Group 1 – online and can afford social tariff or better	87.0% (85.7–89.0)

Reading. MRP's *point estimates* line up well with OAC-based synthetic estimation's — DCI 3% at 20.7% vs D's 18.7%, CCI 3% at 41.9% vs 41.1%, Group 1 at 87.0% vs 85.0%. For the well-identified outcomes the two routes agree to within ~2 percentage points, This provides a check that both methods are working.

However, this route is a more challenging method to use give the sample size (likely at the lower limits for this method). As a result the **the CIs for the three low-prevalence outcomes are broken:**

- **Social tariff 3%: 3.4% (12.9–81.8)** — lower CI above the point estimate.
- **LILI: 2.1% (2.2–79.7)** — same pattern.
- **Cohort C: 4.0% (13.2–82.5)** — same pattern.

This is a known failure mode of when the outcome is rare (there are limited number of cases in the groups) and one or more random-effect cells (here OAC subgroups with very few or zero positive cases) can impact the calculation. The average result found (point estimate) is unaffected but the simulation of the CI is less accurate where the model is least confident (low number of target cases). For a national comparison of regions this is potentially fixable. However, the MRP's averages (point estimates) are still informative as a model-based cross-check on OAC-based synthetic estimations.

4 Side-by-side comparison: OAC vs MRP vs UK

Side-by-side: UK estimate vs GMCA Routes D and E

Large D-vs-E differences usually point to a demographic interaction that D's coarser pooling misses

Outcome	UK (LCF)	GMCA – OAC-based synthetic estimation	GMCA – MRP	D vs E (pp)
Internet costs ≥ 3% of income (online households)	18.0% (16.8–19.3)	18.7% (17.2–20.4)	20.7% (19.6–22.2)	-2.0
Total telecoms ≥ 3% of income (all households)	38.2% (36.4–39.8)	41.1% (38.7–43.3)	41.9% (39.8–43.4)	-0.9
Social tariff (£5/wk) ≥ 3% of income (all households)	3.4% (2.8–4.0)	3.9% (3.1–4.7)	3.4% (12.9–81.8)	0.6

²A more robust method would be to use Census data for the synthetic post-stratification stage. However, this would require a significant reworking and likely not lead to additional information unless the two methods diverged greatly, which, as we will see later, they do not. An in-depth national-regional comparative analysis might take this route.

Side-by-side: UK estimate vs GMCA Routes D and E
Large D-vs-E differences usually point to a demographic interaction that D's coarser pooling misses

Outcome	UK (LCF)	GMCA — OAC-based synthetic estimation	GMCA — MRP	D vs E (pp)
Low-Income Low-Internet (mobile-only + poverty)	2.0% (1.5–2.5)	2.8% (1.9–3.7)	2.1% (2.2–79.7)	0.6
Cohort C — Groups 2 & 5 (can't afford social tariff at <3%)	3.9% (3.2–4.7)	4.7% (3.6–5.7)	4.0% (13.2–82.5)	0.7
Group 1 — online and can afford social tariff or better	87.0% (85.9–88.0)	85.0% (83.6–86.8)	87.0% (85.7–89.0)	-2.0

Reading. Both methods agree closely on every outcome — the largest point-estimate difference is 2.0pp (DCI 3%, where MRPreads 20.7% to OAC 18.7%, and Group 1, where MRP reads 87.0% to OACs 85.0%). On a properly identified MRP this level of agreement says the model's demographic post-stratification is not picking up much that the OAC composition alone misses.

The other thing the comparison shows is what's *not* there: meaningful divergence on any of the six outcomes. If you'd seen a 5%+ gap on, say, Cohort C between the methods, that would be a flag that GMCA's demographic mix within the relevant OAC subgroups departs from the national LCF. The absence of that difference provides reassurance that both routes are finding the same GMCA story.

5 Demographic breakdowns (OAC-based synthetic estimation)

The following demographic breakdowns use the OAC-based synthetic estimation. The breakdowns below take each demographic stratum and apply OAC-based synthetic estimation within it.

OAC-based synthetic estimation — GMCA DCI 3% stress, by income quintile (online households)

Income quintile	GMCA (D)
Q3	10.6% (8.2–13.5)
Q4	3.9% (1.5–6.5)
Q1	52.3% (47.7–55.9)
Q5	1.6% (0.4–3.3)
Q2	24.6% (21.7–27.7)

Reading. The income gradient at GMCA scale recovers the same shape as the national LCF, with sharper Q1 concentration:

- **Q1: 52.3% (47.7–55.9)** — more than half of GMCA's bottom-income-quintile online households spend $\geq 3\%$ of disposable income on internet costs. This is essentially at the national Q1 figure of 55% — small downward shift, well within the CI.
- **Q2: 24.6% (21.7–27.7)** — a step down but still ~ 1 in 4 households.
- **Q3: 10.6% (8.2–13.5).**
- **Q4: 3.9% (1.5–6.5).**
- **Q5: 1.6% (0.4–3.3)** — the comfortably-online tail.

The headline finding from the main report — “DCI 3% stress rises from 19% nationally to 55% in Q1” — therefore reproduces cleanly for GMCA at 52% in Q1, with the same gradient through the higher quintiles. The CIs are tight enough to support quotation as headline numbers in a GMCA-targeted output.

OAC-based synthetic estimation – GMCA Cohort C share, by official poverty status

Poverty status	GMCA (D)
Not in poverty	0.0% (0.0–0.0)
In poverty	33.5% (28.5–38.8)

Reading. Cohort C is **essentially a pure poverty signal at GMCA scale**:

- **Not in poverty: 0.0% (0.0–0.0)** — zero out-of-poverty households in GMCA are in Cohort C, to within bootstrap precision.
- **In poverty: 33.5% (28.5–38.8)** — about a third of in-poverty GMCA households fall into Cohort C. This sharpens the headline framing from the main report. Nationally, Cohort C is 3.9% of all households; in GMCA it's 4.7%; and the entire 4.7% comes from the in-poverty 12% of the GMCA population (within the Census-population definition of poverty applied here). For policy targeting the rule: **for GMCA, “in poverty” is operationally a good proxy for “in Cohort C”**, works well. About a third of in-poverty GMCA households needing direct support beyond a basic social tariff. That maps cleanly to policy approaches that are means-tested (e.g. voucher scheme) using existing benefits-receipt records as the gating criterion.

6 GMCA affordability by Local Authority (Using OAC)

The OAC-subgroup means are national LCF numbers — they don't depend on the target area, only on the composition weights used to combine them. So the extension to a per-LA breakdown is mechanical: build one OAC composition table per GMCA LA, then post-stratify the same national subgroup means against each LA's composition. Each row of the table below is one of the 10 GMCA metropolitan boroughs; each column is one of the six headline outcomes. Average estimates only, no confidence intervals.

OAC – GMCA affordability estimates by Local Authority

Point estimates (%); rows = 10 GMCA metropolitan boroughs; columns = six headline outcomes

LA	DCI 3%	CCI 3%	ST 3%	LILI	Cohort C	Group 1
Bolton	18.7%	41.2%	3.7%	2.7%	4.4%	86.0%
Bury	18.4%	40.5%	3.3%	2.1%	3.9%	87.6%
Manchester	17.0%	38.4%	4.6%	3.1%	5.4%	82.7%
Oldham	19.9%	41.8%	4.1%	3.6%	5.2%	81.4%
Rochdale	20.7%	42.5%	4.6%	3.5%	5.7%	82.1%
Salford	19.8%	42.8%	4.2%	3.4%	5.0%	84.4%
Stockport	17.3%	39.5%	3.1%	1.9%	3.7%	88.5%
Tameside	21.7%	44.7%	4.5%	2.9%	5.3%	84.4%
Trafford	18.0%	40.3%	2.7%	2.3%	3.6%	88.2%
Wigan	19.6%	43.2%	3.5%	2.0%	4.1%	87.0%

Reading. The between-LA pattern is remarkably consistent across the six outcomes and traces a clear deprivation gradient across GMCA:

- **The four “most affordability-stressed” LAs are Tameside, Rochdale, Oldham and Salford.** They cluster at the top of DCI 3%, CCI 3%, LILI and Cohort C. Tameside is the single highest LA on the broader affordability measures — 21.7% on DCI 3% (versus a UK average of 18.0%) and 44.7% on CCI 3% (versus UK 38.2%). Rochdale has the highest Cohort C share at 5.7%,

and Oldham the highest LILI share at 3.6%. All four are post-industrial LAs sitting in the top decile of national IMD.

- **The three “least affordability-stressed” LAs are Stockport, Trafford and Bury.** Stockport has the lowest LILI (1.9%) and highest Group 1 (88.5%); Trafford has the lowest Cohort C (3.6%) and the lowest social-tariff 3% share (2.7%, below the UK average). Bury sits just above them on most measures. These are GMCA’s leafier suburbs and the profile matches.
- **Manchester is a distinctive dual case.** It has the *lowest* DCI 3% (17.0%) and CCI 3% (38.4%) of any GMCA LA — below the UK average — but among the *highest* on the rare-outcome measures (ST 3% = 4.6%, LILI = 3.1%, Cohort C = 5.4%) and the second-lowest Group 1 share (82.7%). This is the classic student-and-professional inner-city pattern: a large slice of very-low-income and very- high-income households, so the median-affordability measures look mild but the deep-poverty tail is larger than average. Any GMCA policy targeting the Cohort C population needs to think about Manchester as a “high need but concentrated” LA rather than a “median-need” one.
- **The between-LA spread is largest on Group 1 (81.4% Oldham to 88.5% Stockport, a 7.1pp gap)** because that measure captures the whole “affordability fine” tail. The stress measures have narrower spreads in absolute pp — Cohort C runs from 3.6% (Trafford) to 5.7% (Rochdale), a 2.1pp gap — but the relative differences are large: Rochdale’s Cohort C share is 58% higher than Trafford’s.
- **The GMCA total in §4 sits above the UK average because the population-weighted contribution of the four higher-deprivation LAs (Manchester+ Salford + Oldham+ Tameside makeup nearly half of GMCA households) outweighs the lower stress in Stockport, Trafford and Bury.** For a GMCA-wide voucher scheme, the £8.7m/year Cohort C costing in §4 breaks down roughly along these LA lines — with the four northern and eastern LAs (Rochdale, Oldham, Tameside and inner Manchester) accounting for a materially disproportionate share of the household count.

7 Notes and caveats

1. **OAC-based synthetic estimation assumes within-OAC homogeneity.** Each LCF respondent in an OAC subgroup contributes equally to that subgroup’s mean regardless of region. GMCA’s OAC composition then weights those means. The estimate is therefore only as good as the assumption that GMCA households *within* an OAC subgroup behave like the national LCF average for that subgroup. For most affordability outcomes this is a reasonable assumption — OAC subgroups are designed for within-subgroup homogeneity — but it can break if there is a strong GMCA-specific effect that crosses OAC subgroups (e.g. a region-wide cost-of-living issues not elsewhere in the country).
2. **MRP uses a synthetic post-stratification frame.** As flagged in §3, the frame here is constructed by projecting GMCA’s OAC composition through the national LCF’s within-OAC demographic distribution. This works *as we don’t have* Census 2021 GMCA cell counts at present. If we can get these, maybe to do this analysis at a national level (comparing regions) — NOMIS bulk tables at LA × age × tenure × income quintile equivalent — the analysis can be done with one line inside the build-poststrat-frame code chunk. The MRP code does not change.

3. **MRP's CIs break for low-prevalence outcomes in this run.** As reported under §5, the simulated CIs for Social Tariff 3%, LILI and Cohort C come out with lower bounds *above* the point estimate (e.g. 4.0% (13.2–82.5) for Cohort C). This is the classic `arm::sim()` failure mode when one or more random-effect cells (here OAC subgroups with very few or zero positive cases) drive the draws into very wide territory. The point estimates remain correct because the model's MAP-style prediction is unaffected. Until the CIs are refit using such things as `lme4::bootMer` or a Bayesian model, **it is better to quote OAC-based synthetic estimation's CIs for ST 3%, LILI and Cohort C, not MRP's**. MRP's point estimates remain useful as a model-based cross-check.
4. **Bootstrap settings.** $B = 200$ for OAC-based synthetic estimation and $n_{\text{sim}} = 200$ for MRP are set for a reasonable knit time. For a publishable estimate, raise to $B = 1000$ / $n_{\text{sim}} = 1000$ — the CIs tighten slightly and become smoother.
5. **Sample-size sanity check.** Even at GMCA scale, both methods pool information *across* OAC subgroups and (for MRP) across regions via the random effect. The effective sample size driving each GMCA estimate is therefore much larger than the implicit ~170-280 GMCA respondents the audit identified — that's the entire point of using this synthetic estimation and MRP.



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