



**Oldham**  
Council

# Digital Oldham

Business Intelligence Service  
January 2019

Dan Hodgson, Laurence Rafferty, Martin Burroughs

Final V1.0

# Contents

<b>Introduction</b>	<b>3</b>
<b>Infrastructure &amp; Availability</b>	<b>4</b>
Current Broadband Speeds & Access	5
Broadband Speeds & Products	6
3G & 4G Coverage	12
5G & “Full Fibre” Broadband Rollout	13
<b>Digital Engagement</b>	<b>14</b>
Customer Insight: Technology & Internet Usage Profiles	15
Historical Analysis	18
Communication Preferences	19
Social Media	21
Customer Insight: Online Account Management	26
MyAccount Engagement	28
Council Social Media	30
<b>Technology &amp; Industry</b>	<b>31</b>
Customer Insight: Access to Technology & Online Services	32
Wi-Fi Hotspots & Libraries in Oldham	37
Digital Industry Within and Around the Borough	39
<b>Digital Literacy &amp; Skills</b>	<b>42</b>
<b>Appendices</b>	
A: National & Local Targets & Measures	45

# Introduction

This report seeks to bring together an array of intelligence on digital communications in Oldham.

## What This Report Will Inform

There is a continual demand for intelligence of this sort, for a variety of business purposes, which is often hard to satisfy as effectively as should be the case.

This report should thus inform and enhance:

- The evidence base for marketing campaigns,
- The prioritisation and shaping of work streams within the Resident First programme or SDA programmes,
- The writing of the Economic Strategy and any future local Digital Strategy,
- Individual service or elected member enquiries,
- The evidence base for response to regional proposals and emerging funding bids.

## Key Findings

- **Infrastructure** - Oldham's overall digital infrastructure is good. However, there are pockets of poorer coverage, particularly broadband in Failsworth and parts of Saddleworth, and 2G/3G around some deprived communities and rural fringes.
- **Digital Access** - Different communities within Oldham have access to, and use, the digital world in very different ways. In broad terms, prosperous, older peripheries tend to use the internet for transactions, but not for social interaction, whilst many poorer communities are the opposite. This can create a "poverty premium", and creates inclusivity challenges when moving our services to electronic delivery.
- **"Free" Internet** - This is widely available through the borough, via libraries or wifi hotspots. However, there are areas with no provision at all within walking distance, notably Holts and Alt.

## Future Developments

This is intended to be a rolling document, and relevant data and research will be added periodically, as it becomes available.

In particular, we will seek to reflect the following

- **Mosaic (Experian) data** - Many of the detailed maps and statistics shown are based on modelled Mosaic data. Whilst this does allow for a detailed picture, the underlying surveys were last updated in 2013, and there is thus a lag. A major update is expected in 2019, with annual updates to follow.
- **Digital Literacy** - At present, little information is available at a local level. However, work by Lloyds Bank is intended to lead to local figures being produced, so we will monitor this, and include them when they become available.

# Infrastructure & Availability

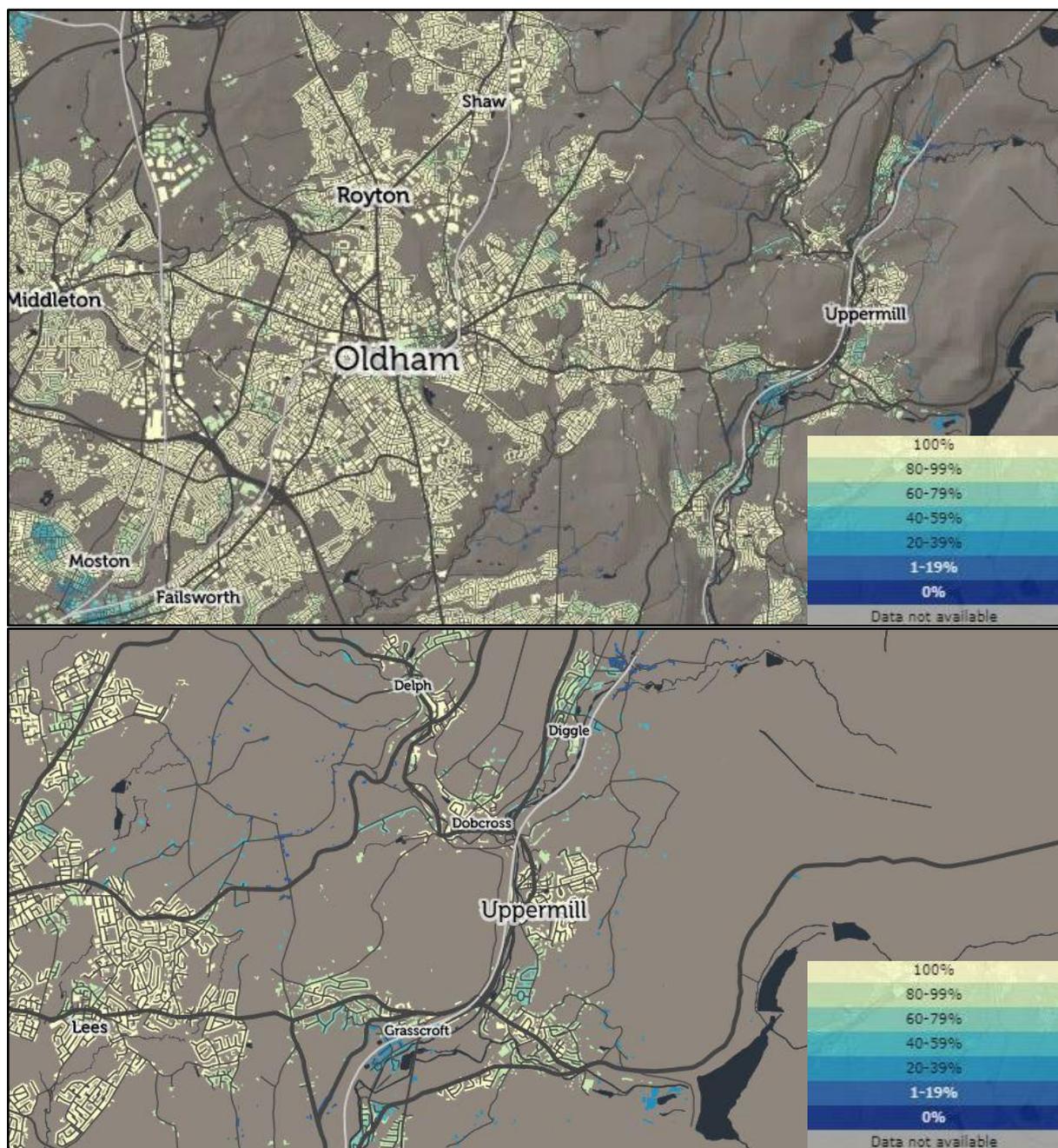
## Key Points

- **Broadband Availability** - 99.1% of Oldham's Residents and Businesses have the potential to access Fibre Internet (speeds of over 24 Mbps).
- **Broadband Uptake** - 81.1% of Oldham's Residents and Businesses actually use Fibre Internet in their premises.
- **Ultrafast Availability** - 66.4% of Oldham's Residents and Businesses have the potential to access Ultrafast Internet (speeds of over 100 Mbps).
- **Ultrafast Uptake** - 34% of Oldham's Residents and Businesses actually use Ultrafast Internet in their premises.
- **Slow Connections** - Patches where connection speeds are under 20 Mbps can be found in Lees, Grasscroft, Diggle, and Failsworth.
- **Mobile Internet** - There is excellent 4G coverage throughout the borough, although there are pockets (eg Fitton Hill, Grotton) where there is a relatively weak signal for 2G/3G coverage.
- **5G Mobile Internet** - There are plans to launch access to 5G in Greater Manchester over the next few years. These will likely be centred around the city centre area.

## Current Broadband Speeds & Access

### Broadband Availability

Oldham has well developed internet infrastructure, with practically all of the borough's population able to access fibre optic broadband in their homes. As *Fig 1* demonstrates, there is close to 100% coverage within the central Oldham area. However, the lower end of Saddleworth appears to have less access, and whilst lower levels may also be noted on the border of Moston and Failsworth, this falls primarily within the borough of Manchester.



Lower access levels are found at the south end of Grasscroft, to the east of Greenfield near Dove Stone Reservoir, and towards the north of Diggle.

<sup>1</sup> Mapping produced using Consumer Data Research Centre tools & research  
<https://maps.cdrc.ac.uk/#/geodemographics/vulnerability/default/BTTTTFT/10/-0.1500/51.5200/>

## Broadband Speeds & Products

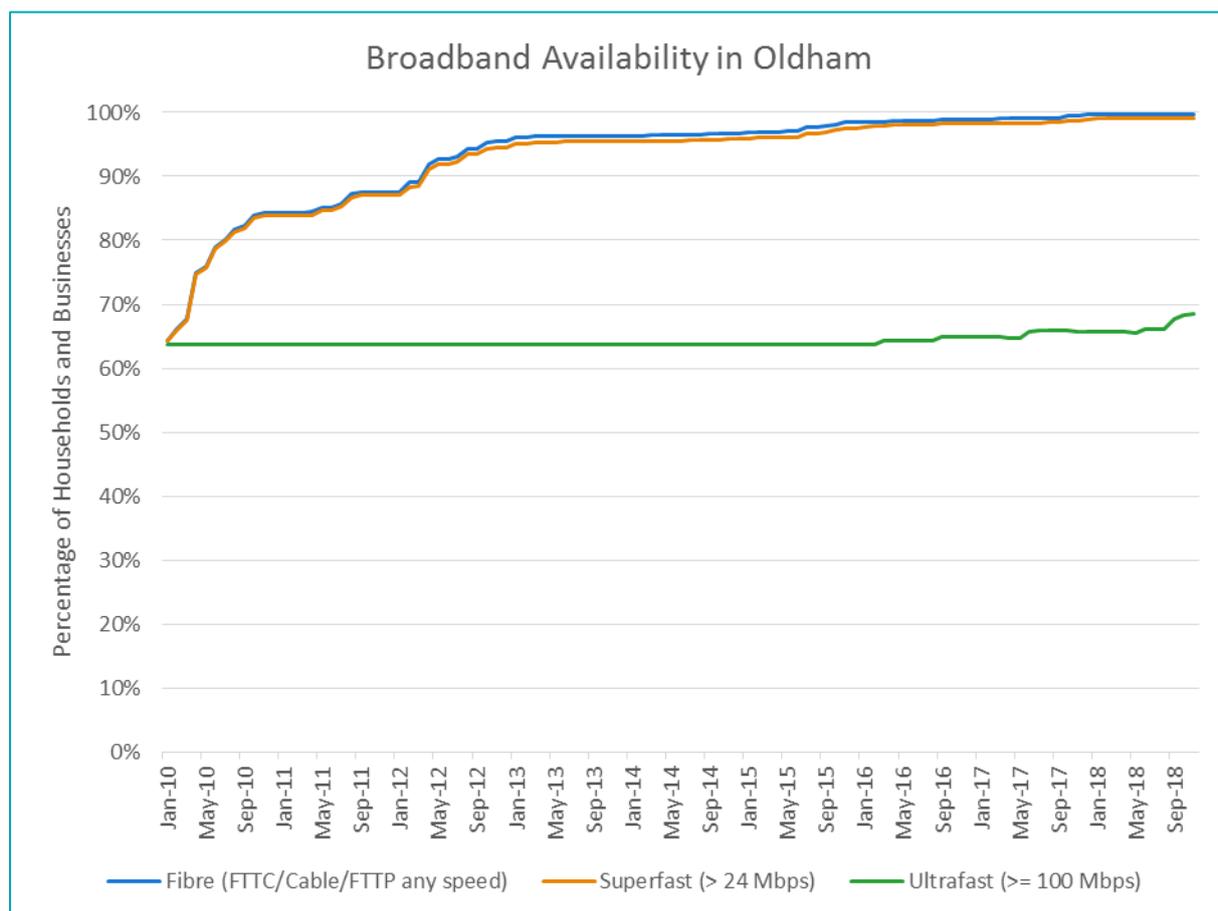
Broadband availability, however, is only part of the equation, as there are many different speeds and suppliers available, with marketing jargon making it difficult to compare products. The table below (*Fig 2*) outlines the currently accepted definitions in the UK. Please note that they vary by country, and have evolved over time, but that any mention within this document will refer to these classifications.

Connection Type	Download Speed	Notes
Standard (not broadband)	0.5 – 8 Mbps	Also known as “Dial Up” or ADSL. Relies on copper telephone cable – now largely redundant in the UK.
High Speed	16 – 24 Mbps	Employs upgraded (ADSL2+) copper telephone lines. Areas where fibre optic cabling hasn’t been installed rely on this, or else it is employed as a budget option for those with basic needs.
Superfast	25 – 80 Mbps	Requires “Fibre to the Cabinet” (FTTC), with copper wiring linking the ‘cabinet’ to individual households – this means the greater the distance from the ‘cabinet’ a property is, the slower the available speed. This is the most common connection type available in the UK, with BT generally being the owner and maintainer of the infrastructure. BT, Sky, PlusNet, and TalkTalk are key suppliers, but there are many other smaller companies offering Superfast products.
Ultrafast	80 – 160 Mbps	The main supplier of Ultrafast Broadband in the UK is Virgin Media, who use their own national fibre network, which was laid in the late 1990s. They are the only significant supplier using “Fibre to the Home” (FTTH) connections and hence any ‘Ultrafast’ availability is likely through them. Other ‘Ultrafast’ products (such as BT Infinity 3 & 4) require installation of additional equipment and can be expensive. These products approach ‘Hyperfast’ speeds (up to 300 Mbps) and are more often used by SMEs, than residences.
Hyperfast/Gigabit	500+ Mbps	Hyperfast and Gigabit broadband is currently only available in areas of central London and a few other large cities (including Greater Manchester, though not within Oldham Borough). There are also pockets of remote rural communities where no fibre was previously installed, which have had Hyperfast internet fitted instead – though these are few and far between.

*Table 1: Broadband in the UK definitions, upload speeds and additional information*

## Broadband Availability in Oldham

The breakdown of the type of the level of broadband coverage in the borough can be seen in *Fig 3* – clearly Superfast connections are all but ubiquitous throughout Oldham (99.1%) with a very high level of coverage present as far back as 2015. The level of Ultrafast connections however currently covers close to two thirds (66.43%) of the borough – this will mostly consist of Virgin Media’s network (BT Openreach is likely to become a bigger player in years to come).



*Fig 2: Broadband availability in Oldham<sup>2</sup>*

Currently, less than 1 in 200 (0.49%) of the borough’s premises (both residential and business) are unable to access at least “High Speed” broadband (16+ mbps) connections. This means Oldham has the joint 5<sup>th</sup> best rate in Greater Manchester, with Tameside (0.15%), Bury (0.30%), Bolton (0.34%) and Trafford (0.40%) having a better rate, whilst Wigan has the same. Stockport (0.52%) and Rochdale (0.59%) have slightly worse rates, whilst Manchester (1.46%) and Salford (1.89%) have significantly worse rates.

Oldham performs similarly in terms of “Ultrafast” broadband (100+ mbps) connections. We have the 5<sup>th</sup> worst rate in Greater Manchester with 66.43%. This compares to a Greater Manchester low of 48.04% in Tameside, and a Greater Manchester high of 90.33% in Wigan.

<sup>2</sup> Data taken from *ThinkBroadband* analysis <https://labs.thinkbroadband.com/local/oldham,E08000004>

## Download and Upload Speeds in Oldham

Both download and upload speeds in Oldham have been increasing significantly and consistently over time. Calculated mean and median download and upload speeds can be seen below, along with their linear trend lines. Note that the mean speeds are considerably higher than the median speeds. This is due to the increasing uptake of Superfast and Ultrafast broadband in the borough.

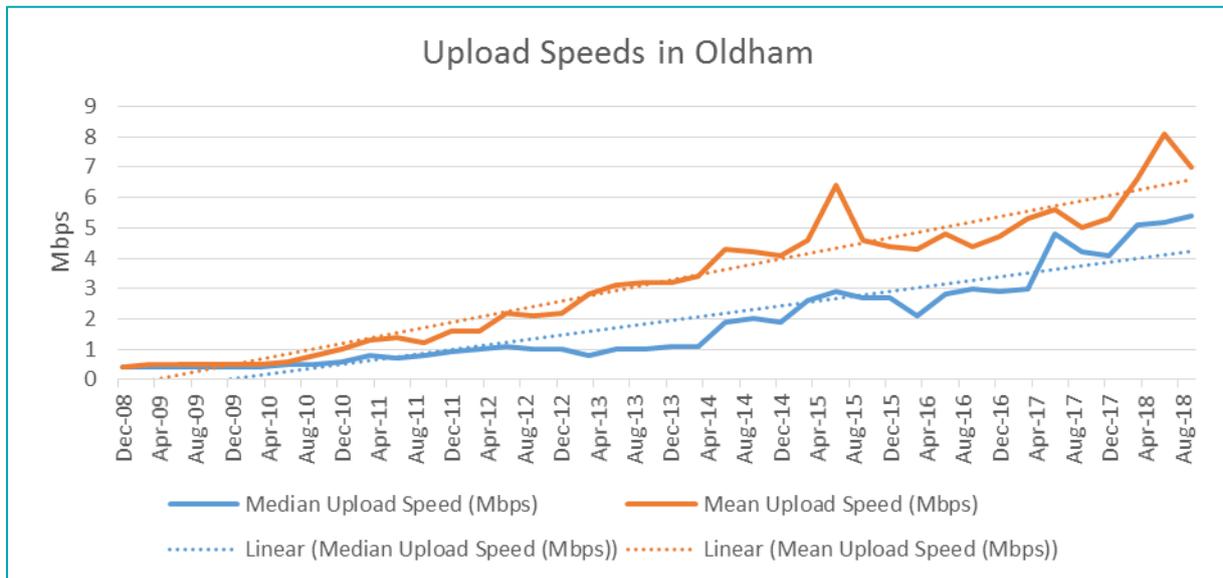
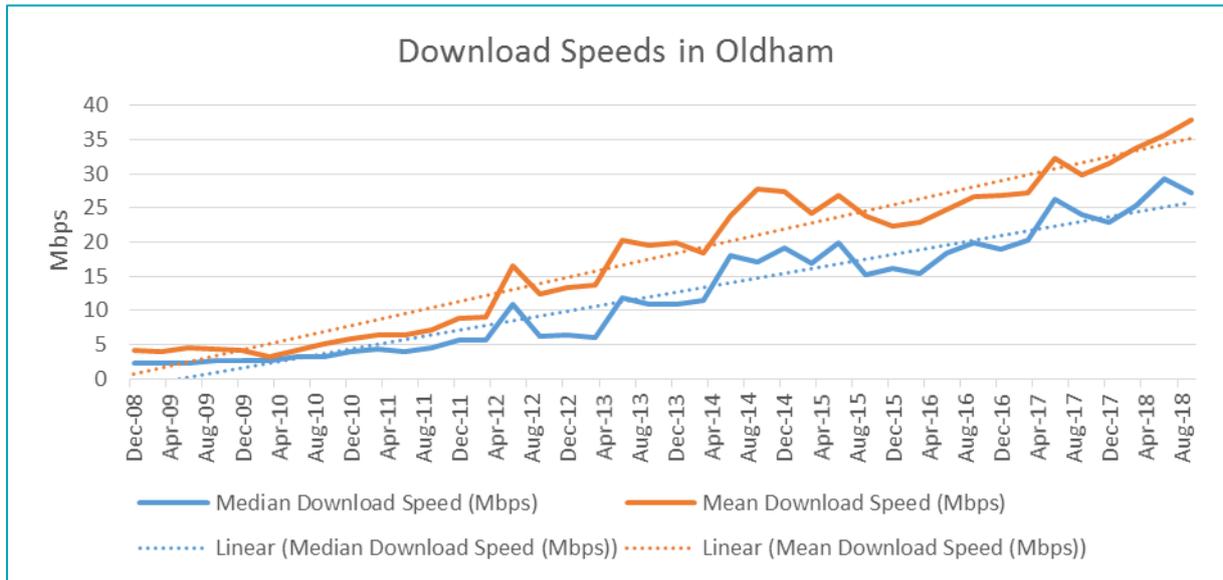


Fig 3: Download & Upload Actual Speed Test Results in Oldham<sup>3</sup>

<sup>3</sup> Data taken from *ThinkBroadband* analysis <https://labs.thinkbroadband.com/local/oldham,E08000004>

## Broadband Uptake in Oldham

The same source also details the estimated real-world take-up of various broadband options in the borough. This details that around a fifth of the borough still relies on ADSL-type connections (18.8%), whilst almost half of Oldham's households use Superfast 'FTTC' connections (47.1%), and a third (34%) have Ultrafast cabled connections. These Ultrafast connections consist of Virgin Media customers.

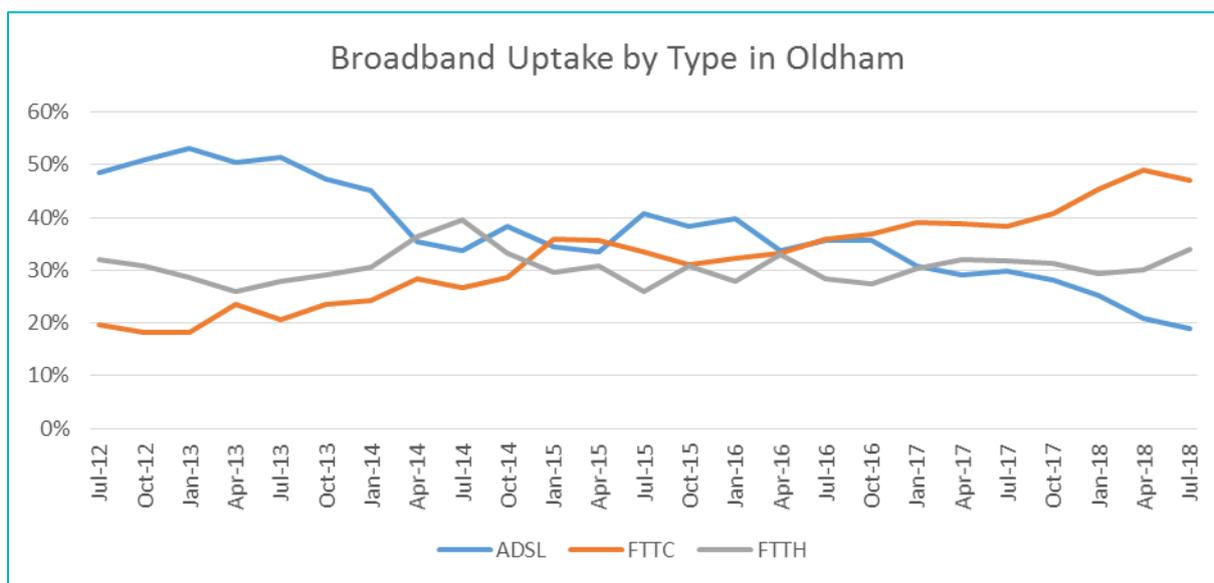


Fig 4: Types of Broadband used in Oldham<sup>4</sup>

From the above graph we can see that, over time, people in Oldham are generally replacing their ADSL connections with FTTC connections. Since the drop to around 30% in July 2012, the number of people using Virgin Media's FTTH connection has stayed relatively stable.

According to estimates from Mosaic (Experian), 2.9% of the borough do not access the internet at all, whilst 5.7% access it less than daily.

<sup>4</sup> Data from *ThinkBroadband* - <https://labs.thinkbroadband.com/local/oldham,E08000004>

## Broadband Speeds by Area

Despite the wide availability of broadband services in the borough, there is some variation in the speeds available when comparing geographical areas. *Fig 5* shows a large proportion of Oldham residents have access to good quality connections (green), or at least adequate/average download speeds (white). There do however, appear to be distinct areas where high-speed coverage falls below that seen in the rest of the borough.



*Fig 5: Broadband Speeds in Oldham by Output Area as of 2017<sup>5</sup>*

There are distinct sections of 'average' quality broadband coverage to be found in Failsworth (See *Fig 5A*), though only a fraction of the section in white actually lies within Oldham Borough. The surrounding area, which is a part of Manchester Local Authority, also suffers from poor upload speeds. It would seem likely that this area as a whole is ripe for investment in infrastructure by broadband providers. If pressure were required to bring this issue to the fore, it would seem sensible to do so in concert with Manchester City Council. As well as this, the areas known as Luzley Brook and Heyside (between Royton and Shaw) and South Fitton Hill and Bardsley in Medlock Vale, are also only capable of achieving middling download speeds.

---

<sup>5</sup> Mapping produced using Consumer Data Research Centre tools & research  
<https://maps.cdrc.ac.uk/#/geodemographics/vulnerability/default/BTTTTFT/10/-0.1500/51.5200/>



Fig 5A: Broadband Speeds in Failsworth by Output Area as of 2017<sup>6</sup>

There is also a clear lack of high speed connections across Saddleworth (*figure 5B*). In particular there are pockets of very low service to be found around Rhodes Hill (south of Lees), north of Diggle, and around Grasscroft, as well as a number of isolated properties found to the west of Delph and Dobcross. However, the main residential areas of Uppermill, Dobcross, Diggle and Delph all appear to be capable of receiving at least average broadband speeds.



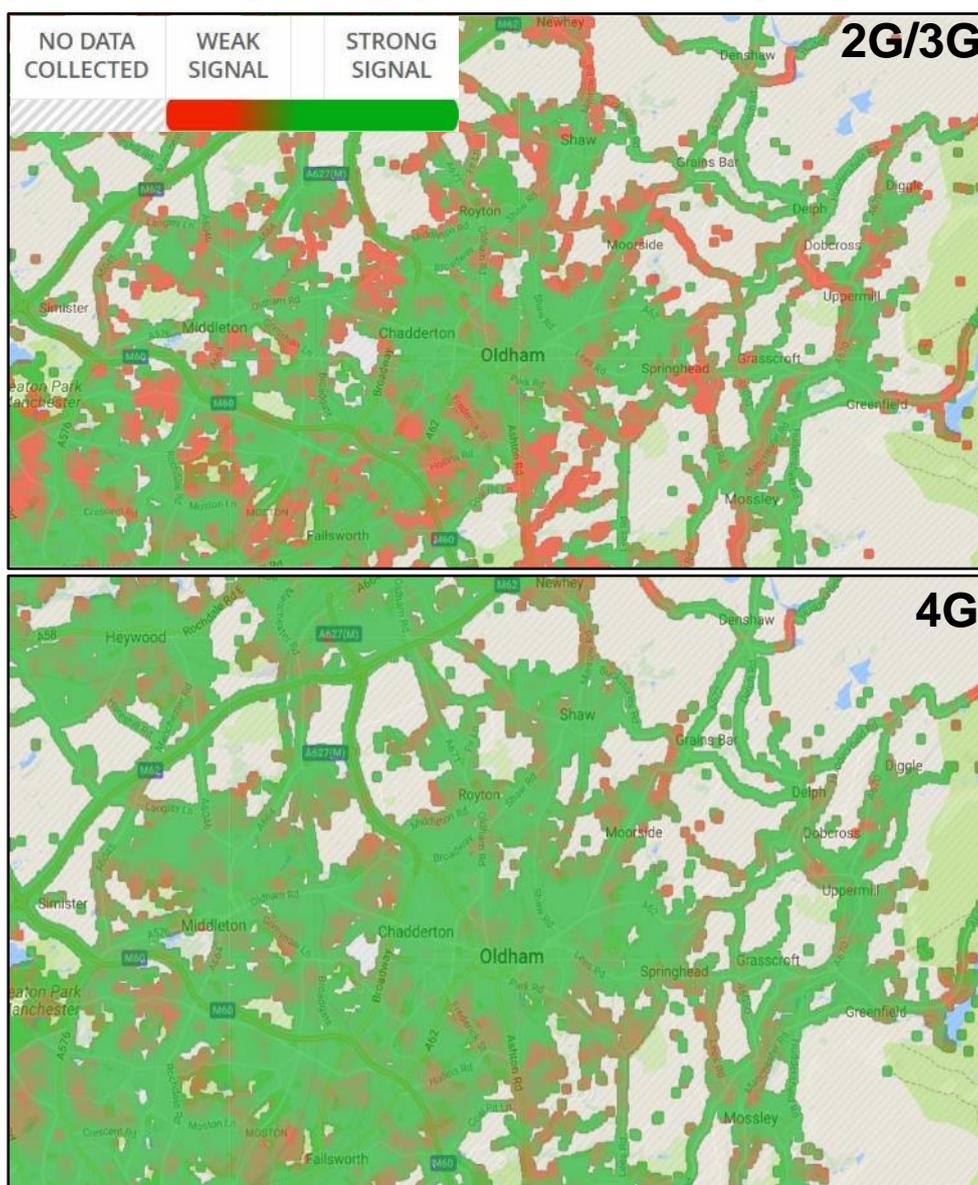
Fig 5B: Broadband Speeds in Saddleworth by Output Area as of 2017<sup>6</sup>

<sup>6</sup> Mapping produced using Consumer Data Research Centre tools & research  
<https://maps.cdrc.ac.uk/#/geodemographics/vulnerability/default/BTTTTFT/10/-0.1500/51.5200/>

## Mobile Broadband - 3G & 4G

The coverage of current-generation mobile data in the borough is relatively strong. *Fig 6* shows the strength of both previous generation technologies (i.e. 2G and 3G signal) as well as current generation 4G service. Where 4G is concerned there are few areas with demonstrably low signal strength, and these are generally to be found at the very edges of built up areas, or in-between rural communities. 2G/3G coverage does have some notable areas of weak signal, including Fitton Hill, Holts, Groton, parts of Hollinwood and many rural fringes.

The caveat here, is that this data is gathered by crowd sourcing, so is more reliable where there are many instances of data traffic, such as along roads. As such, it is less reliable in infrequently visited areas, such as houses in remote areas.



*Fig 6: 2G/3G and 4G coverage in Oldham created using live User Data<sup>7</sup>*

<sup>7</sup> Mapping produced using Consumer Data Research Centre tools & research

<https://maps.cdrc.ac.uk/#/geodemographics/vulnerability/default/BTTTTFT/10/-0.1500/51.5200/>

## 5G & “Full Fibre” Broadband Rollout

In terms of next-generation connectivity, there is a need for unlimited ‘full fibre’ broadband and ‘5G’ infrastructure within the borough, as well as the wider Greater Manchester area. This will ensure that local demand for information, both personal and industrial, is met well into the future.

Levels of ‘full fibre’ connectivity are currently well below 1% in Oldham, and the borough isn’t part of a national Hyperfast broadband rollout, though plans are being formed at a GM-level to install the infrastructure for such connectivity.

GM has been successful in securing £23.8m of capital funding through the **Local Full Fibre Network (LFFN) Challenge**. This will be used to connect over 1500 GM Local Authority buildings, GM Fire and Rescue buildings, and Health and Social Care Partnership (CCGs) premises/sites across the region. Additional funding will also be sourced locally. It is expected that delivering full fibre to public sector premises in GM can have a transformational impact on digital infrastructure across the City Region, leading to an increase in full fibre coverage from 2% now to around 25% by the end of 2020. If this is achieved, Greater Manchester, by far, will then have the best high speed digital infrastructure coverage of any city-region in the UK.

Further investment has come via the **Gigabit Voucher Scheme**, which provides small grants to businesses to update their internet connections. Active through 2018, but now continuing with smaller grants, this scheme gave out 34 grants totalling £99k to Oldham businesses- the fourth highest figure in GM, after Manchester, Stockport and Salford. It is not clear whether this positively reflects digital awareness in Oldham or negatively reflects greater infrastructure issues. Either way, this impacts positively on businesses with a total of between 200 and 450 full time employees.

Regarding 5G mobile internet, this is directly linked to the level of full-fibre internet infrastructure available. This is because data towers will require full fibre internet infrastructure to process and distribute the amount of data required for such high download and upload rates. Provided the above infrastructure is in place, the rollout of 5G technologies should not be far behind.

## Key Points

- **Internet User Classifications** – Oldham’s central wards have a high proportion of “e-Withdrawn” individuals. Where the internet is used, it is likely to be in the form of social media and games, often over mobiles, rather than transactional services.
- **Internet User Classifications** – A 2014 analysis also highlights the number of “Young and Mobile” users in Central Oldham. This makes sense given the young age profile of these areas.
- **Social Media** – Regular users of Facebook and Twitter are concentrated around the centre of Oldham. This corresponds with the concentration of “Young and Mobile” individuals in the area.
- **Disengagement** – The central areas of Oldham also have the highest concentration of individuals who use the internet less than daily, and who do not have an active email account. This corresponds with the concentration of “Passive and Uncommitted” users in central Oldham.
- **Online Account Management** – Saddleworth has the highest rate of online banking usage, as well as the highest rate of online utility management accounts.

## Technology Usage and Digital Engagement Snapshots

Mosaic (Experian) customer insights data can be used to provide estimates on the characteristics of Oldham's residents. This is accomplished by modelling likely behaviour, by placing people into categories using data available on them. The latest Mosaic data for Oldham is based on 2013 statistics (but with 2018 residents) and this is important to bear in mind when viewing the figures below. It is likely that most, if not all, of these figures will have changed in line with national and local trends in the last 5 years, although the overall patterns shown almost certainly remain valid.

### Internet and Social Media Engagement

Disengagement Snapshot		Engagement Snapshot	
Doesn't Access Twitter at All	65.1%	Uses Twitter Daily	13.5%
Doesn't Access Facebook at All	26.7%	Uses Facebook Daily	45.3%
Doesn't Use Online Banking	26.0%	Uses Online Banking Daily	19.6%
Doesn't Manage Utilities Online at All	20.4%	Uses Utility Manager Daily	10.5%
Doesn't Have Internet at Home	12.3%	Has Internet at Home	87.7%
Doesn't Have a Mobile Phone	6.3%	Has a Mobile Phone	93.7%
Uses Internet Less than Daily	5.7%	Uses Internet More than Daily	67.0%
Doesn't Access the Internet at All	2.9%	Uses Internet at Least Daily	94.3%
Doesn't Access Email at All	1.9%	Uses Email Daily	76.8%

Whilst not having a smart TV may not impact people's lives too much, not accessing the internet, either as a personal choice or due to a lack of availability, can greatly limit the opportunities available to individuals. Similarly, with the ever increasing number of high street bank closures, not accessing online banking could make managing personal finances ever more difficult. From the council's perspective, those individuals who are disengaged with technology are the hardest to reach, and therefore the hardest to help. There is a risk that vulnerable individuals, who are also disengaged with technology, may get left behind.

## Customer Insight: Technology & Internet Usage Profiles

### User Profiles – Current Picture

The way in which different socio-economic groups in different areas of the borough use the internet is important to factor in when considering how best to support Oldham's digital infrastructure. Research conducted by the Consumer Data Research Centre has categorised how different communities across the UK *generally* use the internet, giving us an idea of the main needs – and barriers – that specific areas might be experiencing.

Fig 7 shows Oldham and the surrounding areas categorised as one of ten broad groups, according to the most commonly found type of resident in the area. Explanations of the groups which appear on this chart can be seen below figure 7 - descriptions have been condensed to reflect the likely components of Oldham's residents, and the areas within the borough which they can be found.

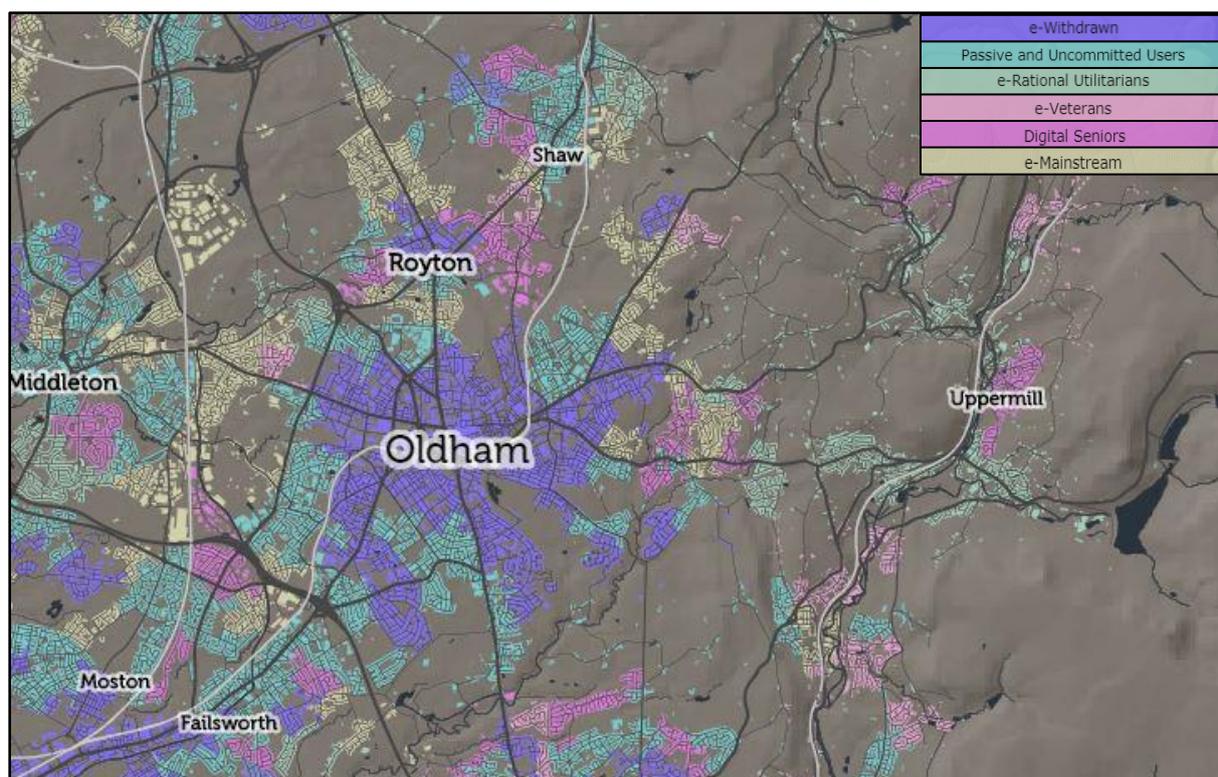


Fig 7: Internet User Classifications by Output Area in Oldham (2018)<sup>8</sup>

#### e-Withdrawn

Located around central Oldham wards with pockets around Royton, Sholver & Failsworth. This Group comprises individuals who are the least engaged with the Internet. The socio-economic profile of the population is characterised by less affluent white British individuals, or areas of high ethnic diversity. It has the highest rate of unemployment, social housing, and people that don't have access to, or have access but never engage with, the Internet. It also expresses the lowest rate of engagement in information seeking, financial services, and access via a mobile device. Online shopping is also particularly low, with the exception of Clothing on Credit - suggesting an opportunistic dimension to Internet usage.

<sup>8</sup> Mapping produced using Consumer Data Research Centre tools & research

<https://maps.cdrc.ac.uk/#/geodemographics/vulnerability/default/BTTTTFT/10/-0.1500/51.5200/>

### Passive and Uncommitted Users

*Located in the suburbs of Oldham including Chadderton, Shaw, St James' and Failsworth*

In this group, many individuals have limited or no interaction with the Internet. Members of this Group have few distinctive characteristics in conventional socioeconomic terms, albeit higher levels of employment in semi-skilled and blue-collar occupations. Individuals are rarely online and most commonly report use once a week or less. There is a mild preference for access via smartphones. The Internet is typically used for social networks, gaming and some limited online shopping.

### e-Rational Utilitarians

*Located around settlements in Saddleworth, the eastern edge of Lees and North of Shaw*

Users undertake online shopping, particularly for groceries perhaps because of the limited local offer from 'bricks and mortar' retailers. Users tend to be late middle-aged or elderly, and as might be expected, include a high percentage of retired home owners. The preferred method of engagement with the Internet is personal computers located at home, with low levels of mobile access. In addition to shopping users search for information or access online banking rather than engage with social networks or gaming: the Internet is used as a utility rather than a conduit for entertainment.

### e-Veterans

*Found in pockets in Diggle, Saddleworth South and between Royton and Shaw*

The e-Veterans represent affluent families, usually located in low-density suburbs, with populations of mainly middle-aged and highly qualified professionals. They are likely to be frequent and experienced users of the Internet, having the second highest levels of Internet access at work (after the e-Professionals users). They engage with the Internet using multiple devices, and in a variety of ways. They are fairly mature users, and have higher levels of engagement for information seeking, online services, and shopping, but relatively less so for communication and entertainment, particularly social networks or gaming.

### Digital Seniors

*User occupy large areas of Royton, Shaw and Lees, central Uppermill and Delph*

Members of this Group are ageing and predominantly White British, retired and relatively affluent. They make average use of the Internet, typically using a personal computer at home. Despite being infrequent users, they are adept enough to use the Internet for information seeking, financial services and online shopping, but less so for social networks streaming or gaming.

### e-Mainstream

*To be found in swathes of Royton, Shaw and Lees plus isolated pockets of Chadderton*

This Group exhibit modal Internet user characteristics but are drawn from a wide range of social echelons as defined using conventional socioeconomic data, and most likely represent heterogeneous neighbourhoods. Their level of engagement is average across most attributes, characterising the typical user.

## Historical Analysis

Similar work was undertaken by CDRC in 2014 (*figure 8*) with a different set of archetypes being matched to small geographical regions. The variety compared to the 2018 data produced demonstrates how difficult it can be to classify complex areas where change is quick – this is particularly true of compressed urban communities.

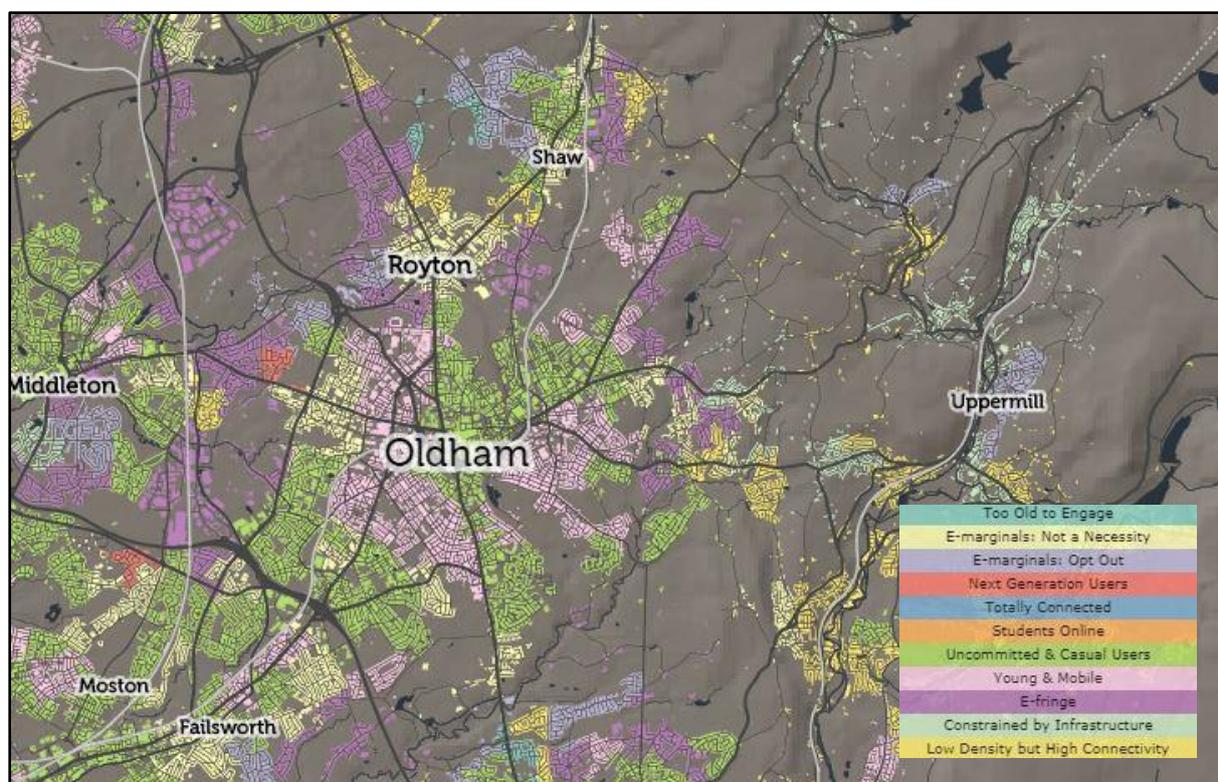


Fig 8: Internet User Classifications by Output Area in Oldham (2014)<sup>9</sup>

Comparing the 2014 and 2018 analyses, the clearest difference is in the communities of West Central Oldham. Whilst these were classified as withdrawn and uncommitted in the 2018 data set, the 2014 analysis seems to focus more on the younger age range that these areas will likely boast. This is due to the prevalence of South Asian communities in these areas, leading them to be classified as “Young and Mobile”. “E-Withdrawn” and “Young and Mobile” share several characteristics, particularly the preference for mobile over desktop devices. The true picture of Oldham likely includes elements of both classifications, across a broad spectrum of users from young and engaged, to disenfranchised, to first-generation immigrants for whom the internet will never be a major factor.

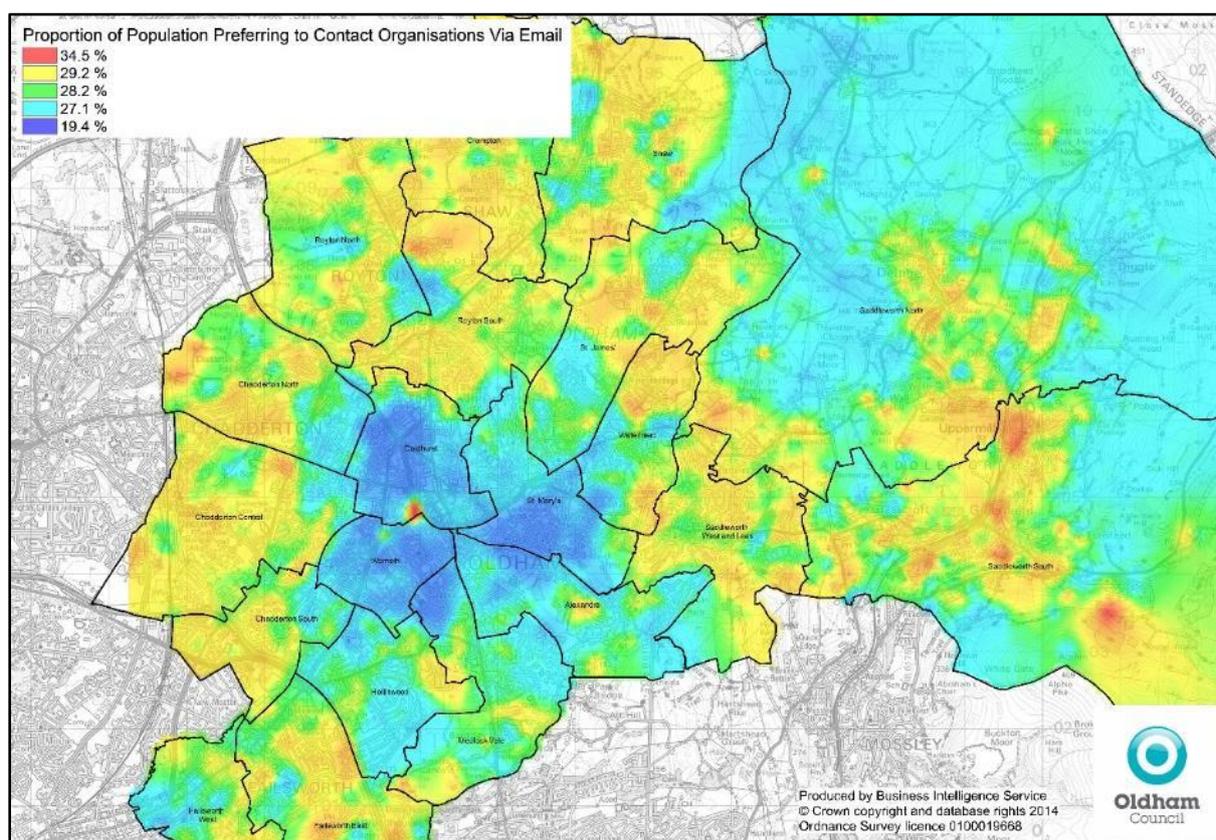
Another change of note is in Saddleworth’s perceived usage. The analysis conducted in 2014 seems to suggest a large number of uncommitted internet users - particularly in Uppermill. This has shifted to a much more tech-savvy cohort in the 2018 data set, despite the assumptions of a mainly white, middle-class, professional cohort holding true. This shift may have occurred for a variety of reasons. Improvements in infrastructure, increasingly digitally skilled older generations, and increasing reliance on the internet in managing a variety of accounts, applications, etc, could all play a role.

<sup>9</sup> Mapping produced using Consumer Data Research Centre tools & research  
<https://maps.cdrc.ac.uk/#/geodemographics/vulnerability/default/BTTTTFT/10/-0.1500/51.5200/>

## Communication Preferences

### Email Usage

Email usage is strong across almost all groups, but the propensity for it to be the *preferred* communication method varies. In terms of Oldham's communities, *Figure 9* shows there is strong preference for this method of contacting organisations in Saddleworth, Royton and Shaw, with relatively low uptake in areas of central Oldham. In central Oldham, poorer white communities and South Asian populations dominate, giving rise to a number of possible explanations – lower desktop/laptop usage in both groups could make writing emails a more laborious task, or else lower English literacy levels could pose a barrier, especially if an issue is perceived as being complex.

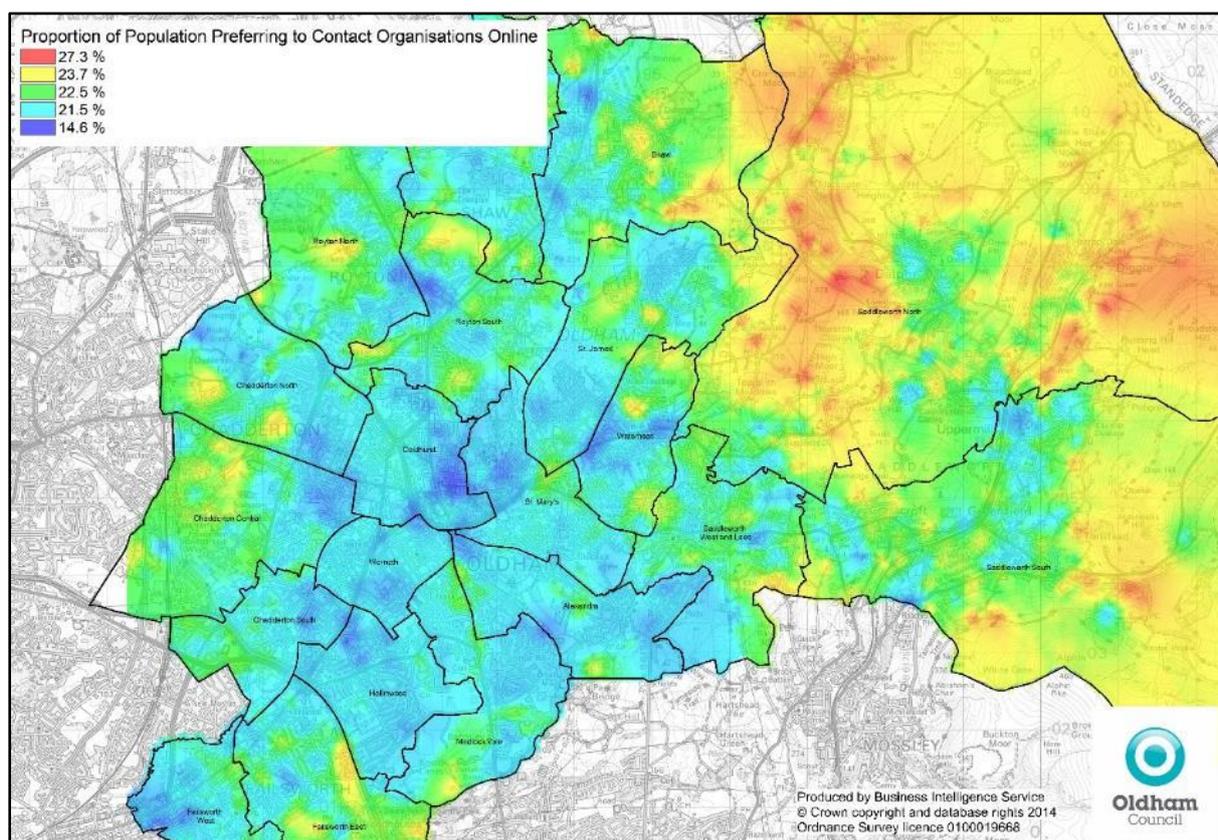


*Fig 9: Mosaic Prediction of distribution of Residents Preferring to Contact Organisations via Email<sup>10</sup>*

<sup>10</sup> This and subsequent Mosaic maps produced by Business Intelligence Service using Experian Mosaic data © Experian 2018

## Online Forms

Using other online contact methods (via forms etc) is less preferable to almost all groups, when compared to email communication (*Figure 10*), with only residents in Saddleworth (and specifically the north of the district) seeming to have a penchant for contacting organisations in this way. This may be due to lower smartphone ownership in the area, which coincides with the lack of 4G coverage in the area. Email communication is more popular and simpler to implement than online forms. In situations where quantitative data (and hence an online form) isn't required, email communication would be preferable to maximise responses.



*Fig 10: Mosaic Prediction of distribution of Residents Preferring to Contact Organisations Online<sup>11</sup>*

<sup>11</sup> Produced by Business Intelligence Service using Experian Mosaic data © Experian 2018

## Social Media

High regular use of social media platforms provides organisations an opportunity to reach a large number of individuals who may otherwise not be engaged in local issues. It is also likely that those using such media are generally more youthful (though the average age of users is shifting upwards).

### Facebook

In Oldham's case (shown in Figure 11), Saddleworth's residents are resistant to Facebook use, as too are the inhabitants of Chadderton. In central Oldham, however, there is much higher regular use and this can be tied closely to higher smartphone usage/lower laptop and PC ownership in these areas. It may also be indicative of the more youthful population prevalent in these areas, in both the White British and South Asian communities, which typically interact with Facebook multiple times a day.

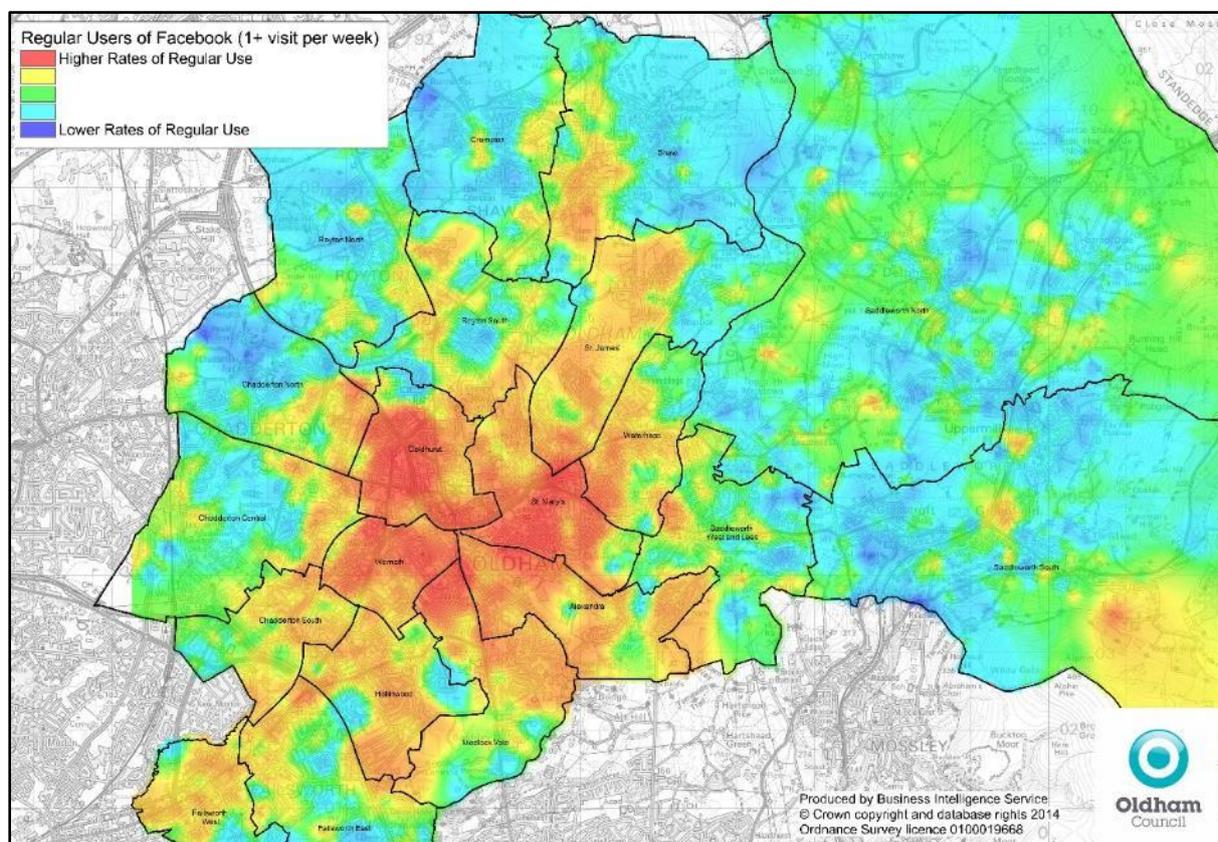


Fig 11: Mosaic Prediction of the distribution of Regular Facebook Users in Oldham<sup>12</sup>

<sup>12</sup> Produced by Business Intelligence Service using Experian Mosaic data © Experian 2018

## Twitter

Twitter provides an opportunity for messages and news to be distributed and shared quickly amongst networks, and typically has an older demographic but lower overall usage than Facebook. *Figure 12* demonstrates high engagement within Oldham is confined to the central wards with much lower use in the outlying districts, particularly Royton & Crompton and Chadderton.

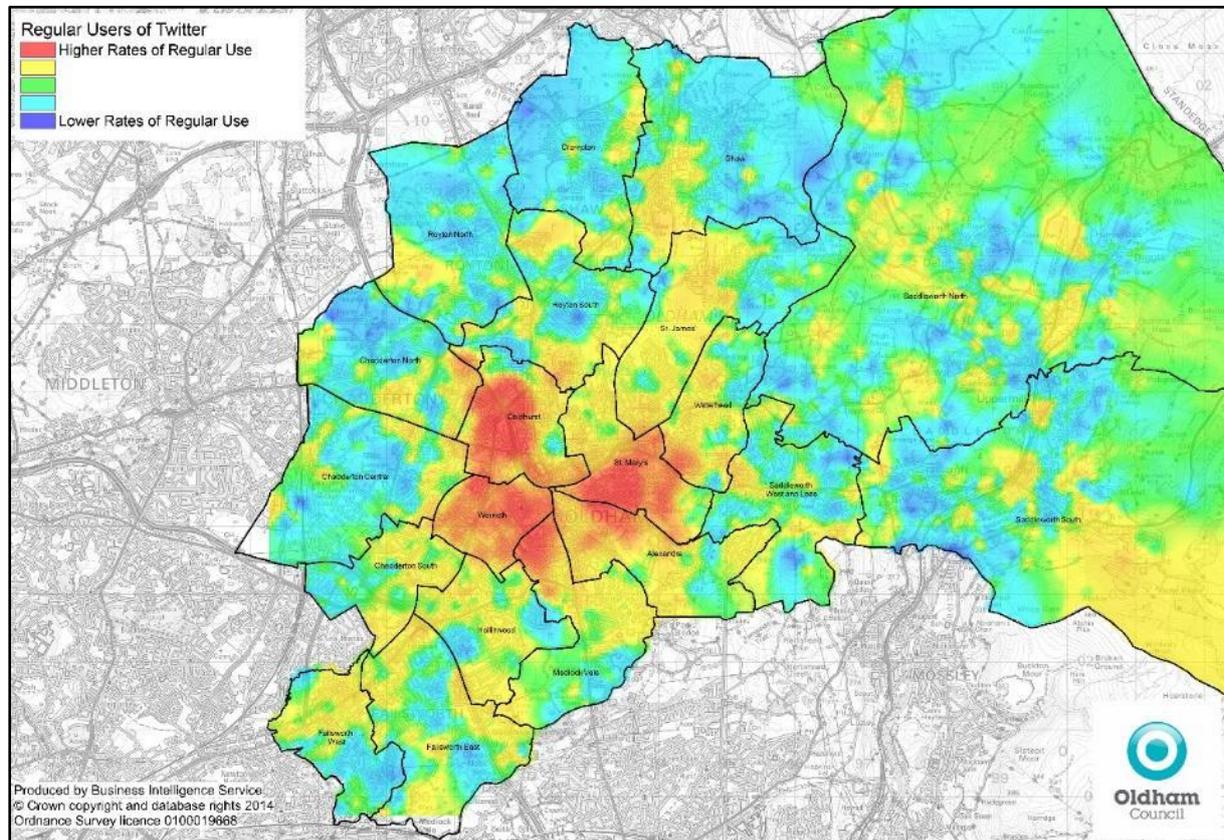


Fig 12: Mosaic Prediction of the distribution of Regular Twitter Users in Oldham<sup>13</sup>

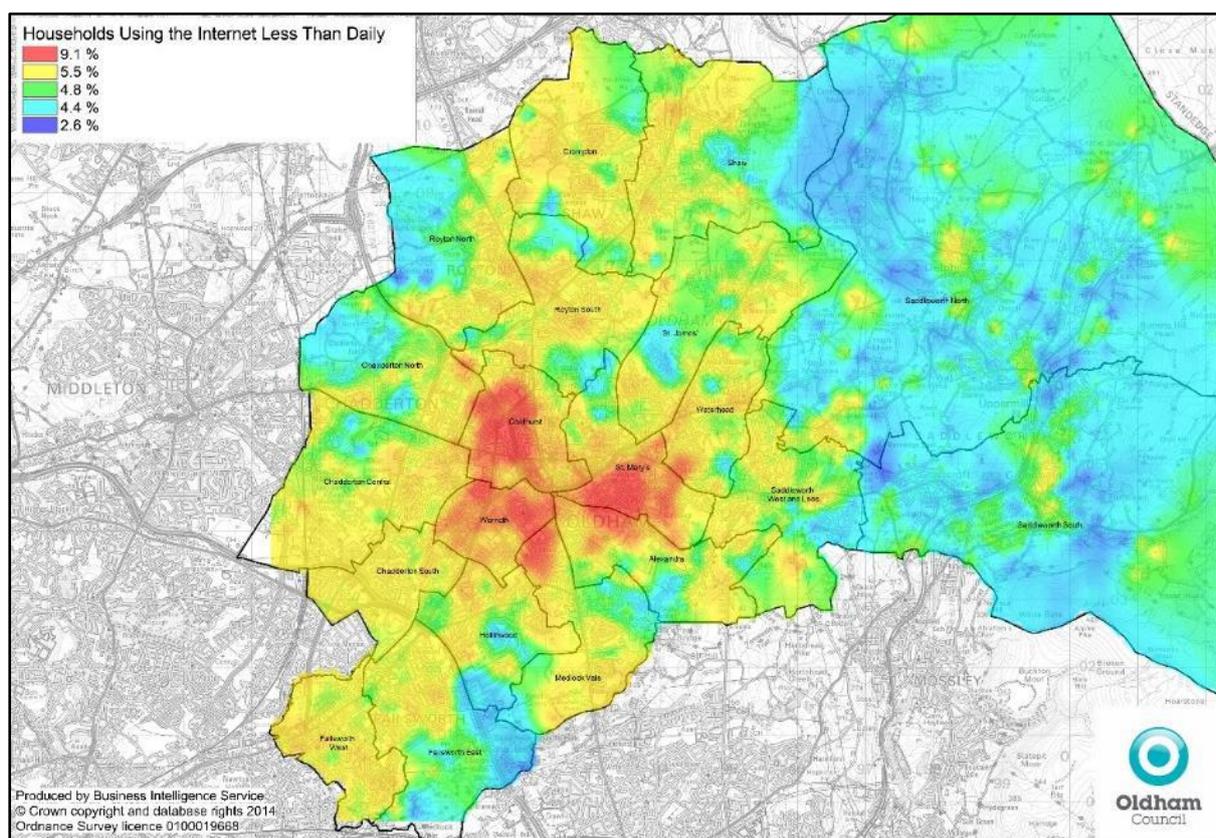
<sup>13</sup> Produced by Business Intelligence Service using Experian Mosaic data © Experian 2018

## Daily Internet Usage

Individuals who do not use the internet on a daily basis may be a good indication of those who, for whatever reason, have not fully integrated with the digital world. Indeed, it may even signify those who are disengaged with society more generally. We would expect individuals who do not use the internet daily to be reluctant to transition to using the internet for account management and information storage (among other things).

The heat map in *Figure 13* shows a distinct area around Oldham town centre where the rate of those who do not use of the internet on a daily basis approaches 1 in 10. This is essentially areas with a large South Asian population, and is probably representative of generational change: whilst younger generations can be classified as “Prospectors”, very web savvy and extensively using mobiles and WhatsApp, older residents or first/second generation arrivals may be far more internet-resistant.

Elsewhere in the borough, around 1 in 20 people can be expected to use the internet less frequently, with a relatively even distribution that may be attributable to a mix of deprivation and distributions of older people.



*Fig 13: Mosaic Prediction of the distribution of Oldham residents using the internet less than daily<sup>14</sup>*

<sup>14</sup> Produced by Business Intelligence Service using Experian Mosaic data © Experian 2018

## Access to an Email Account

Individuals who do not access emails, so presumably don't have an active email account, is a good indication of those who do not interact with the online world in any organised or meaningful way - as email often acts as a gateway to other online pursuits. Without it, account management, social media, and more, are inaccessible.

Using Customer Insight data provided by Experian, we can identify areas of the borough where lack of email use might be a factor. The heat map shown in *Figure 14* shows that – although limited to around 3% in affected areas – the issue isn't concentrated in a single area. Instead, large areas of Coldhurst, St Mary's, Werneth, St James', Alexandra, Medlock Vale and Hollinwood all see relatively low levels when compared to the districts of Royton & Crompton, Chadderton and Saddleworth where only 1-1.5% are thought not to access emails. As with regular internet access, those included in this measure are more likely to be elderly and/or less financially secure – email use may not be seen as a necessity in either case.

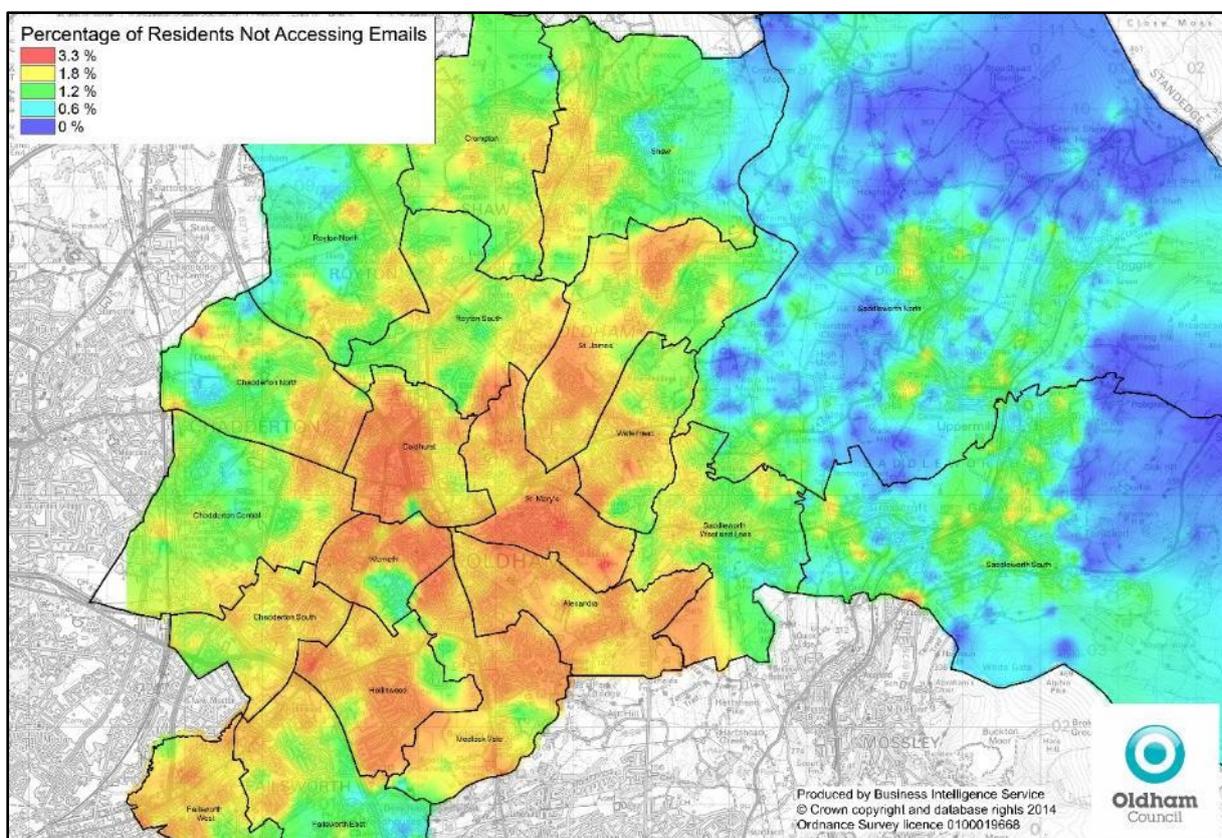


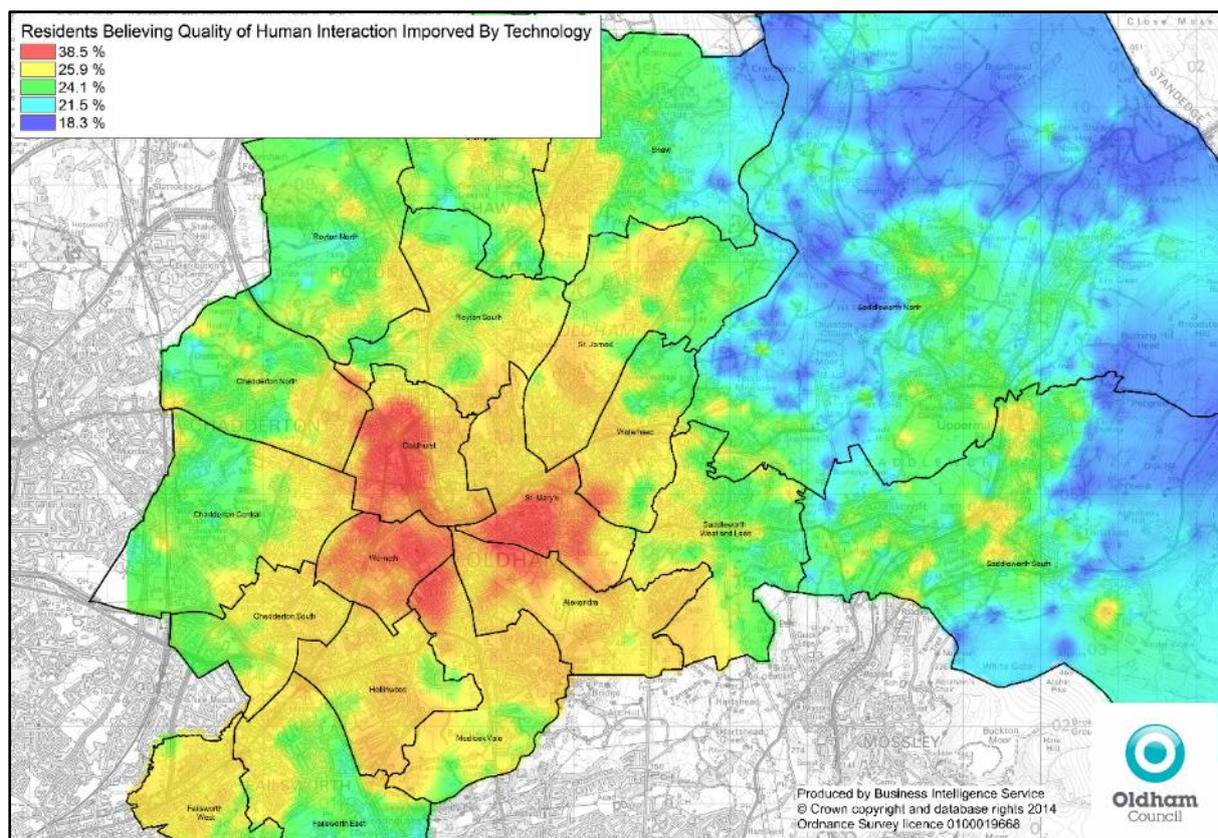
Fig 14: Mosaic Prediction of the distribution of Regular Facebook Users in Oldham 2018)<sup>15</sup>

<sup>15</sup> Produced by Business Intelligence Service using Experian Mosaic data © Experian 2018

## Perception of Technology

Opinions on technology within the borough are thought to vary greatly (*Figure 15*) with clearly defined areas sharing similar opinions on the benefits technology brings to our lives. Areas such as Coldhurst, Werneth and St Mary's in particular are more likely to think that technology can support and enhance human interactions, which clearly correlates with the elevated social media usage noted in these localities.

As the distance from the centre of Oldham increases, so too does the lack of faith in technology's positive effects on human relationships (perhaps correlating with an increase in age) with the lowest rates being found in rural Saddleworth.



*Fig 15: Mosaic Prediction of the distribution of those believing human interactions improved by technology<sup>16</sup>*

<sup>16</sup> Produced by Business Intelligence Service using Experian Mosaic data © Experian 2018

## Customer Insight: Online Account Management

### Online Banking

The use of internet banking demonstrates the ability and willingness to handle important financial matters online. This tells us that the individual could likely handle other financial interactions online. A lack of internet banking use could also correspond to individuals who are less adept at managing their money, and thus more likely to experience financial difficulties. In *Figure 16* we can see that higher levels of internet banking is patchy, with areas such as Royton, Hollinwood, Coldhurst, Waterhead, and the Holts estate, particularly so.

It is the more financially-stable communities in Saddleworth which show the best rates of online bank account management. This is despite the more advanced age profile of the area, which we might have expected to decrease usage. Whilst the higher rate may be due to the higher levels of wealth in these areas, it may also be linked to the higher prevalence of professionals, who are more likely to deal with technology on a day to day basis in their job roles and be more technologically savvy.

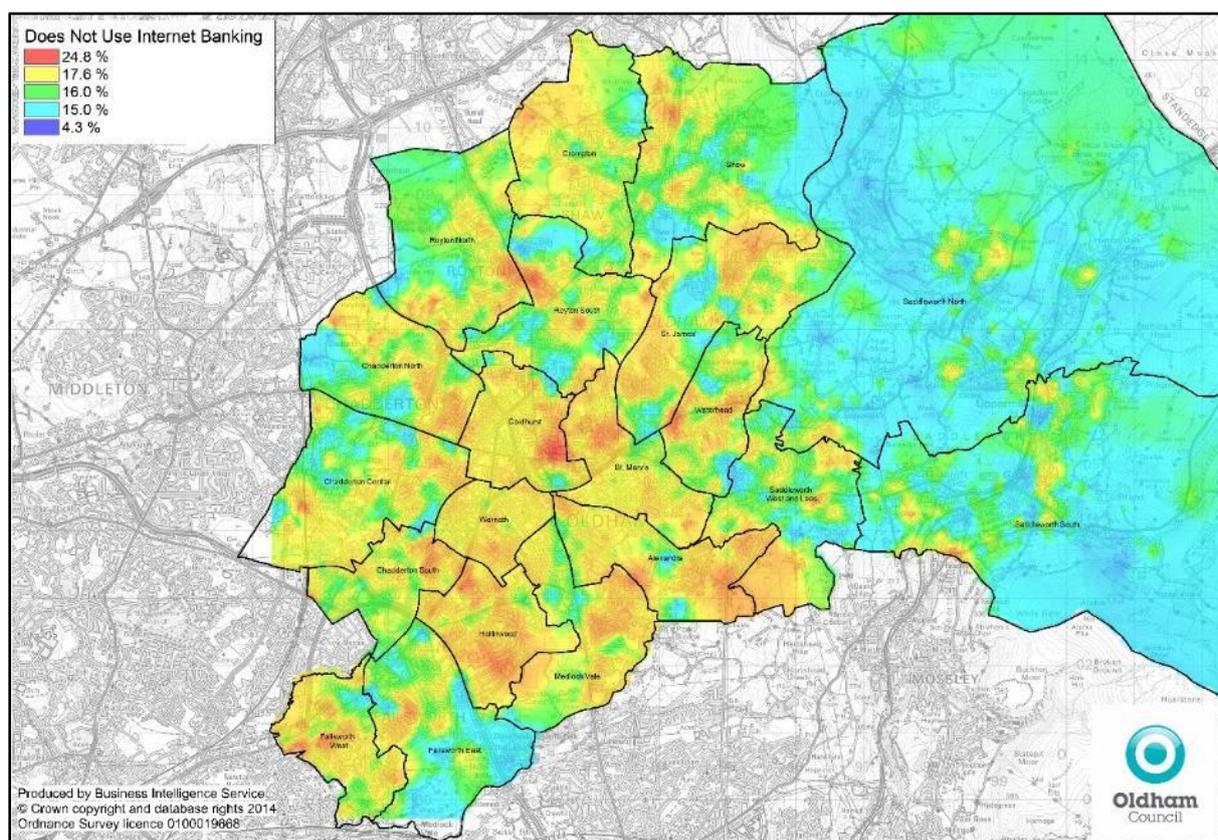


Fig 16: Mosaic Prediction of the distribution of Oldham residents not engaging with Internet Banking<sup>17</sup>

<sup>17</sup> Produced by Business Intelligence Service using Experian Mosaic data © Experian 2018

## Online Utility Management

Similarly to online bank account management, higher rates of online utility account management likely indicates financial awareness, whilst lower rates likely indicate vulnerability.

There appears to be a high degree of correlation between levels of internet banking and levels of online utility management. However, there appears to be a higher rate of individuals who engage with of online utility account management. The lack of physical premises to visit for utility management (as opposed to a traditional bank with a high street presence) may have pushed more users towards this online solution.

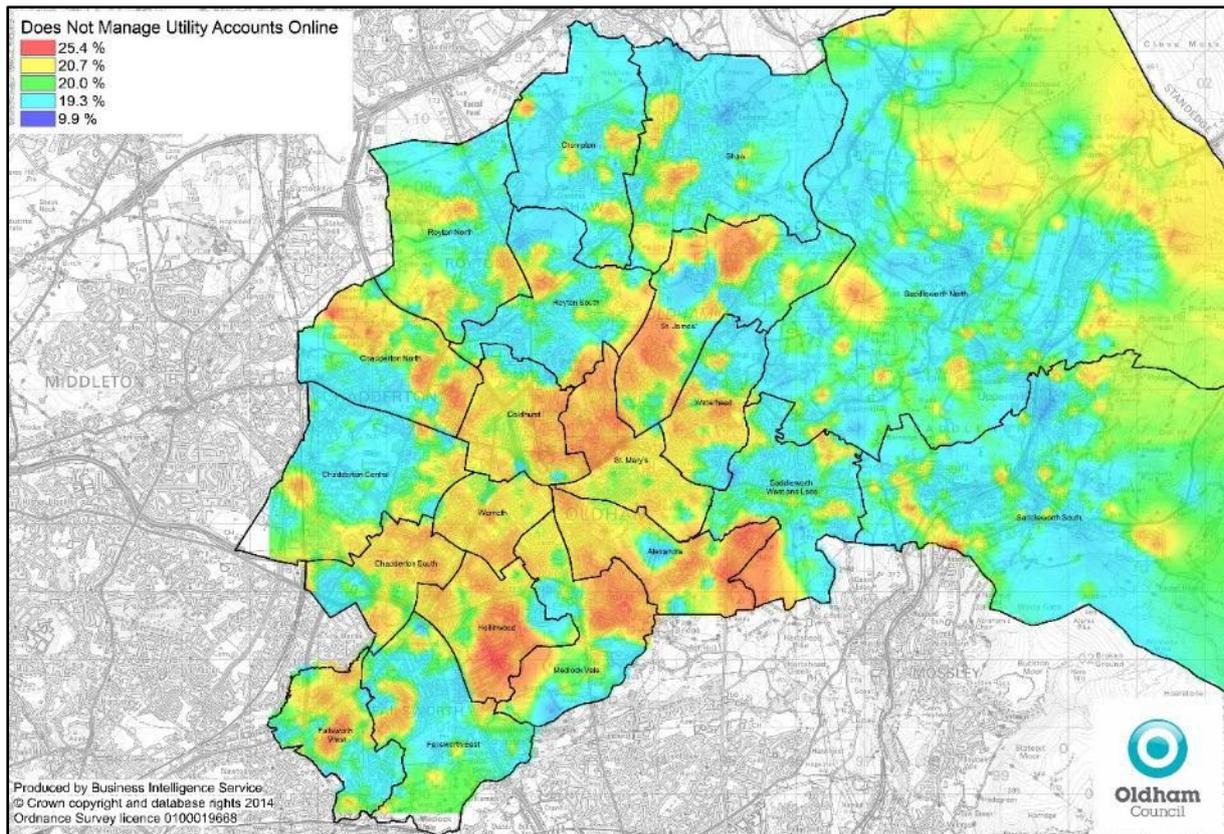


Fig 17: Mosaic Prediction of the distribution of online utility account management<sup>18</sup>

<sup>18</sup> Produced by Business Intelligence Service using Experian Mosaic data © Experian 2018

## MyAccount Engagement

MyAccount is Oldham Council's single-login customer account, which will ultimately be used to integrate all customer transactions. However, it is currently only implemented for Council Tax and Housing Benefit transactions.

Around 9.5% of council tax payers are currently using MyAccount. There appears to be significant turnover in MyAccount users, probably linked to newcomers to Oldham being more likely to use the service and also having greater churn. Those that do not use MyAccount are often users of Direct Debit, which is a low-cost approach, but does not offer the potential for integrated customer transactions. Around a third of households use neither MyAccount nor Direct Debit. These alternative methods increase collection and processing costs for the council.

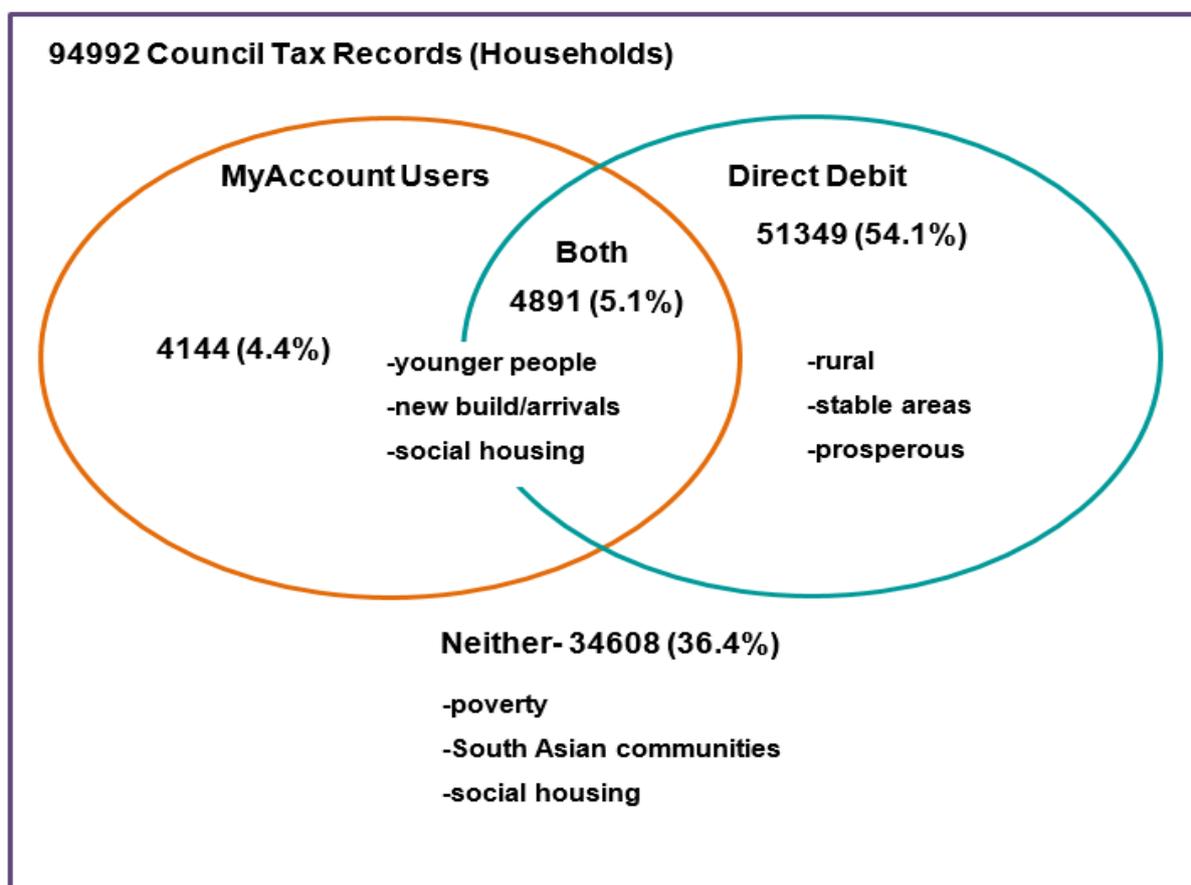
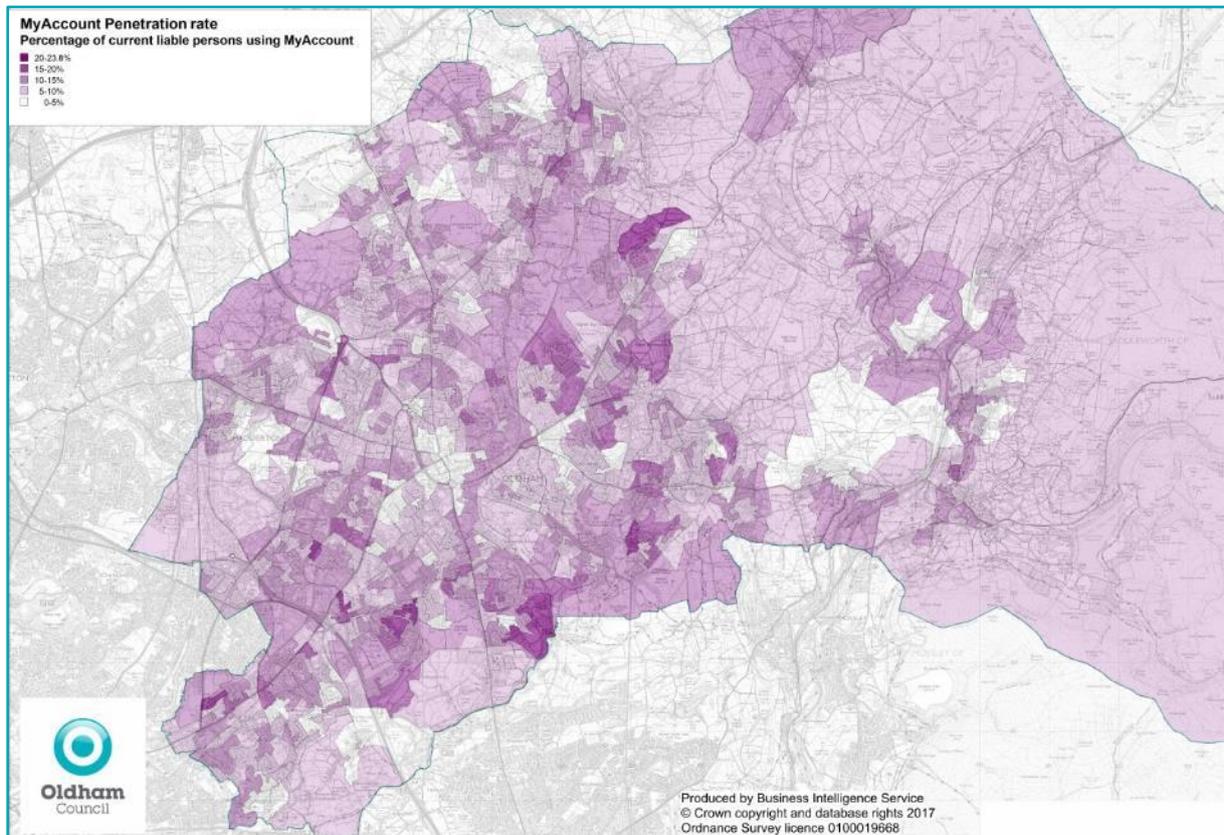


Fig 18: Overview of MyAccount take-up and analysis conducted by Business Intelligence

MyAccount penetration (*fig 19*) is geographically fragmented, and patterns are difficult to interpret. It does appear that rural areas have low take-up, and areas of social housing (and some private rented) have highest take-up. This is especially true where those areas include relatively recent new builds, where there is likely to be a high turnover of people entering the borough.

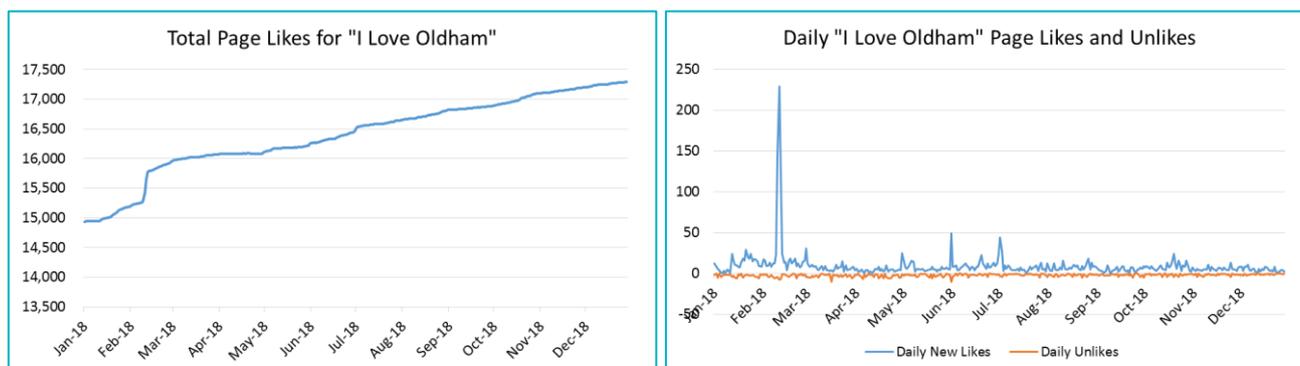


*Fig 19: Penetration of the council's MyAccount online system*

## Council Social Media

### Facebook

Oldham Council has a series of Facebook accounts, inspired by the “Love Where You Live” Campaign. The Council’s main account is “I Love Oldham”, and there are sub accounts for sub regions, such as the “I Love Chadderton” page.



From the above, we can see that the number of people who “like” the council’s Facebook page is steadily increasing. The sharp increase of users around the end of February 2018 coincides with “the Beast from the East”, a cold wave which led to heavy snowfall in the region. As such, this increase in users is likely due to people using social media to check for school closures, road closures, gritting services, and other snow related news. From the 1<sup>st</sup> of January 2018 to the 1<sup>st</sup> of January 2019, the page increased in size by 2,866 followers. This is an average of over 7 new likes per day.

Oldham Council Leader Sean Fielding’s Video Blog is published via the Council’s Facebook page. Though the figure is volatile, it averages around 10,000 views per vlog. This is a significant increase from when the Leader’s Blog was written, and attracted around 1,000 views per publication. This shows people’s preference for video, rather than written, content.

One other interesting metric to mention, is the prevalence of smart phone usage over laptop/desktop usage. Only around 1% of Facebook newsfeed views were made on a laptop or desktop. This demonstrates the changing ways in which people utilise social media, and the shift to people now using it on the go.

### Twitter

At the time of writing, Oldham Council had 21,380 followers on Twitter. This number grows by an average of around 2 followers per day. In a typical month, there are around 15,000 profile visits, and around 1,000 mentions of Oldham Council’s profile.

In recent times, residents have taken to twitter to report issues they have. One notable example is people tweeting bins which need emptying. The social media team does not have the capacity to directly deal with these issues, and this necessitates channel shifting within the council. Similarly to the prevalence of smartphone usage for Facebook above, this demonstrates the changing ways in which people engage with the council, and their expectation that the council change with them.

## Key Points

- **Device Ownership** – Smartphone ownership is most common in the areas surrounding the centre of Oldham. The pattern for Desktop or Laptop ownership is similar, but with a swathe of high rates across Saddleworth. This is potentially due to the high rate of professionals in these areas.
- **Attitudes Towards Technology** – As a general rule, the farther from the centre of Oldham you get, the fewer “Early Adopters” there are, and the more resistant to technology people get.
- **Wi-Fi Hotspots** – Most areas in Oldham are within walking distance of a free Wi-Fi hotspot. Alexandra, Holts, and the westerly section of Chadderton are the main areas which do not have easy access to free Wi-Fi hotspots.
- **Library Computers** – There are 12 libraries across the borough which have computer facilities for residents to access. Chadderton South, Werneth, Alexandra and St James/Waterhead all lack local access to such resources.

## Customer Insight: Access to Technology & Online Services

As with the previous chapter, Mosaic data provides us with insights to technologies owned, but care must be taken to consider recent technology trends.

Technology Owned (or Have Access to) Snapshot	
Smartphone	72.7%
Tablet	51.8%
Laptop	85.2%
PC	70.6%
Smart TV	25.0%

Since 2013, national trends have seen a rise in Smartphone, Tablet, and Smart TV ownership. Laptop ownership has remained roughly stable, whilst PC ownership has declined. It seems likely that PC ownership has declined due to advancements in computer technology meaning that portable alternatives, such as laptops and tablets, can do everything that a PC can, whilst also being more convenient. The rise in the ownership of Smart TVs could be linked to the rise in uptake of streaming sources such as Netflix, as both have been increasing since 2013.

## Smartphone Ownership

Smartphone ownership is likely to be high amongst teens, young adults, and most residents of working age. Despite the age of the data used, the trends shown are still relevant. The highest rates of ownership are found around the central wards (fig 20), with strong usage along the main road corridor through Failsworth and in the Holts estate. This high usage could be due to a number of factors – the younger demographics of the south Asian communities situated close to the centre of town will certainly play a role. It is also possible that attitudes towards personal finances amongst the white British communities in these areas contribute to the higher levels of smartphone ownership.

One knock-on effect of this reliance on mobile internet access is that it will make online-only processes such as application for Universal Credit more challenging, effectively applying a “poverty premium”.

Areas with much lower take-up tend to centre around Royton, Shaw and Saddleworth in particular. These areas are more likely than others in the borough to have older residents.

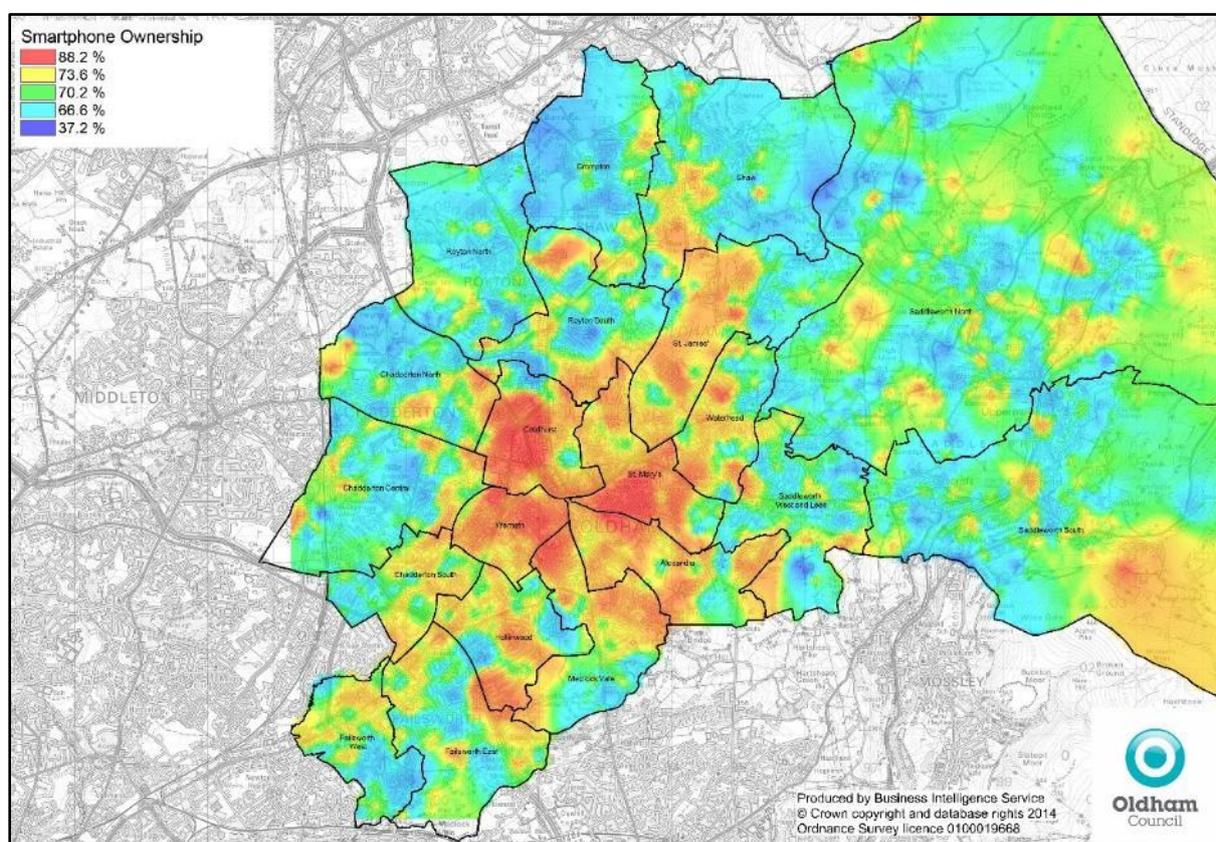


Fig 20: Mosaic Prediction of the distribution of residents owning/having easy access to a Smartphone<sup>19</sup>

<sup>19</sup> Produced by Business Intelligence Service using Experian Mosaic Customer Insight Data

## Computer Ownership

The patterns noted in those owning PCs (either desktop or laptop) does not present a significantly different picture (*fig. 21*) to that for smartphone ownership. Higher rates were found towards central Oldham, where smartphone ownership was also higher. Lower rates of ownership can be seen across Royton South, Crompton, St James', and the band of wards across the south of the borough including Chadderton South, Werneth, Medlock Vale and Holinwood. The highest levels can be seen in Saddleworth, most likely due to the high rate of professionals located in these wards.

As noted in the Smartphone analysis, the data used to create these analyses is likely to be out-of-date – in reality, households without a PC or laptop may have settled on a tablet as an easy-to-use and accessible method of connecting to the internet at home and elsewhere.

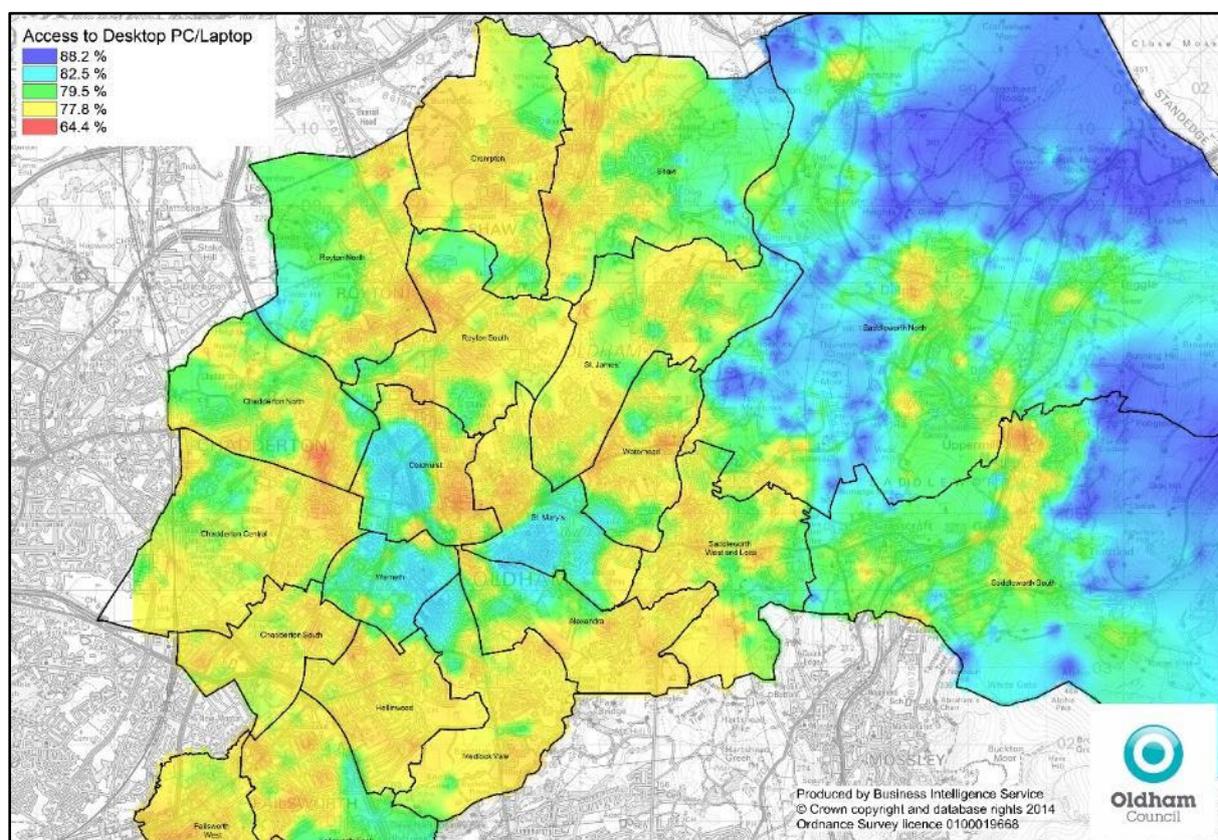


Fig 21: Mosaic Prediction of the distribution of PC/Laptop ownership in Oldham<sup>20</sup>

<sup>20</sup> Produced by Business Intelligence Service using Experian Mosaic data © Experian 2018

## Attitudes Towards Technology

The willingness to actively engage with new technology, systems, or processes is advantageous when trialling new systems or ways of working. By recognising areas in which there is a high proportion of 'early adopters', likely future trends in tech usage amongst the borough's residents can be identified.

Using Experian Customer Insight analysis, we can identify the central Oldham wards of St Mary's, Coldhurst, and Werneth as, by far, the most likely to be home to tech-savvy residents. Few other areas have anywhere near their density of 'early adopters'. Residents in the North and East of the borough are less likely to actively seek out and use new technology.

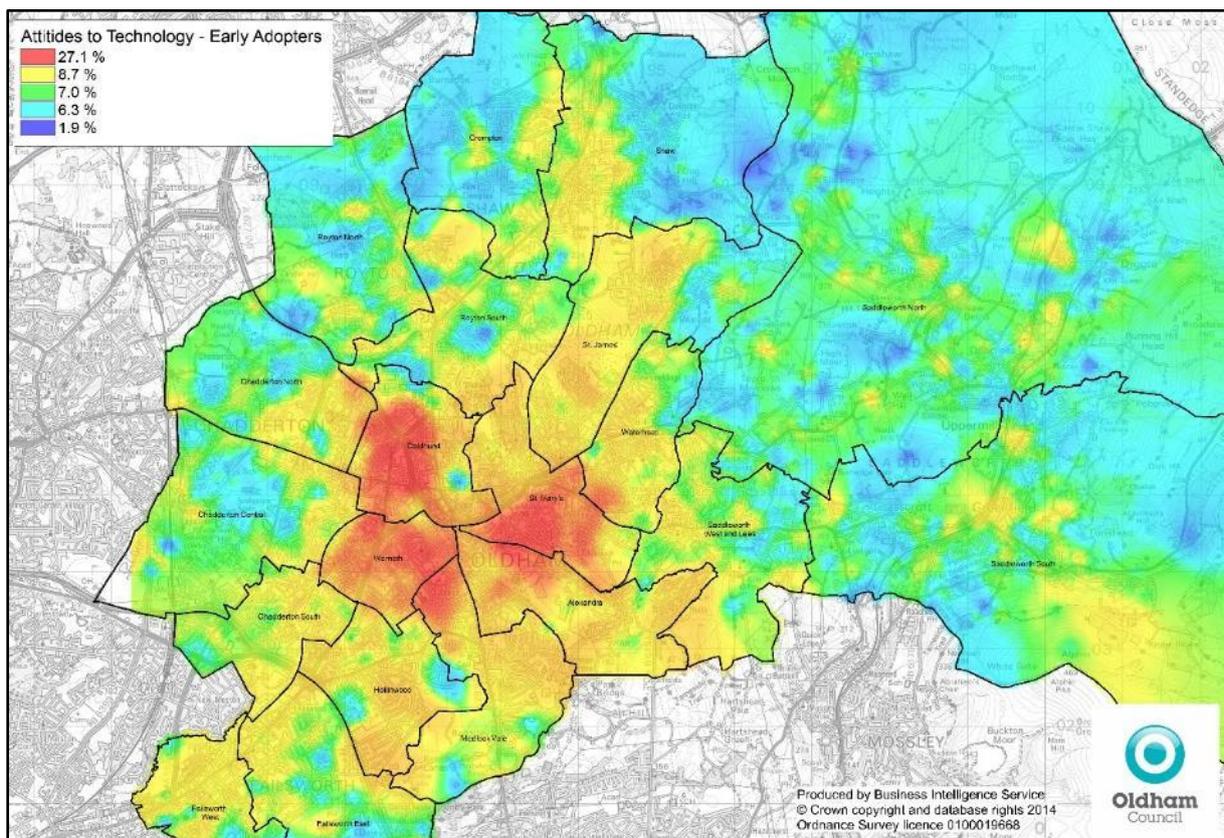


Fig 22: Mosaic Prediction of the distribution of residents who actively purchase and trial new and cutting-edge technology<sup>21</sup>

<sup>21</sup> Produced by Business Intelligence Service using Experian Mosaic data © Experian 2018

The distribution of residents with an actively resistant attitude to technology is fragmented with few distinct trends. Areas such as Royton, Crompton, Shaw, Chadderton, Holts and settlements in Saddleworth all tend more strongly to resistance – these areas should be actively targetted in any campaign aiming to increase online interactions.

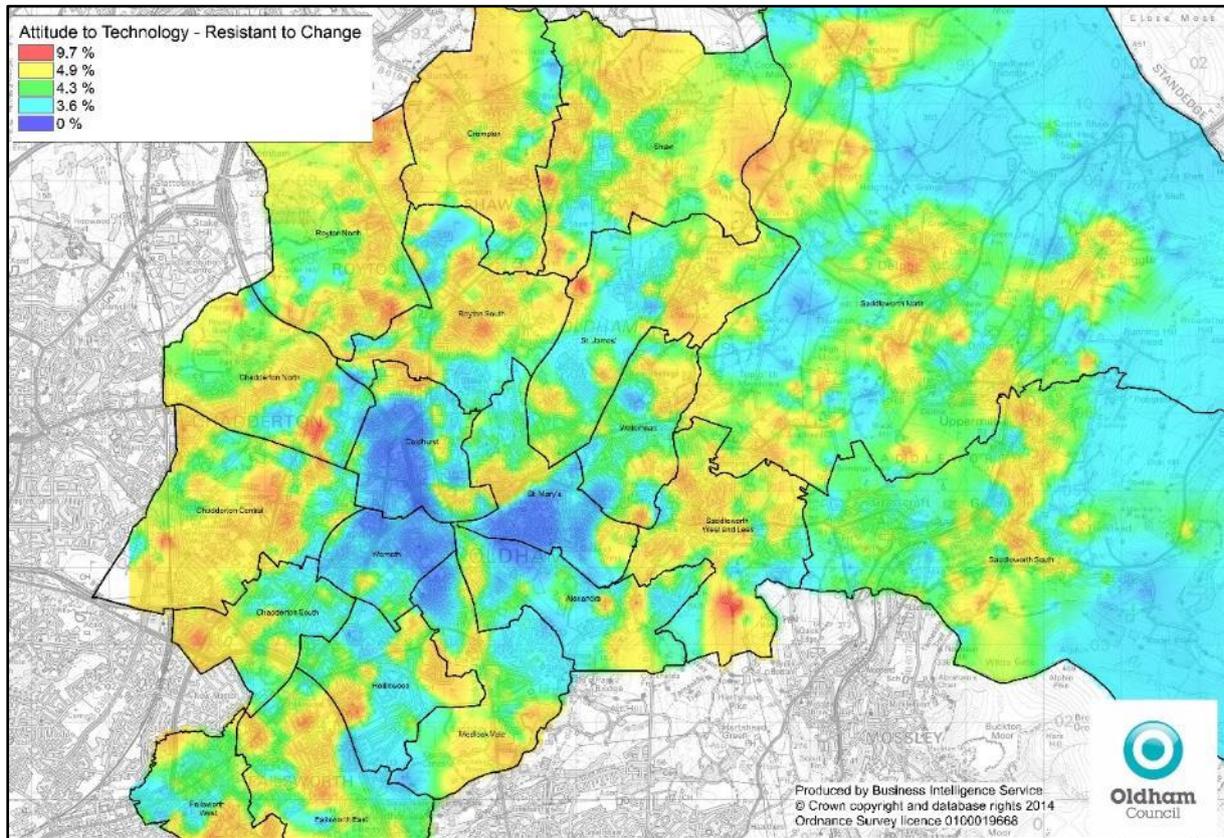


Fig 23: Mosaic Prediction of the distribution of residents resistant to technological advances<sup>22</sup>

<sup>22</sup> Produced by Business Intelligence Service using Experian Mosaic data © Experian 2018

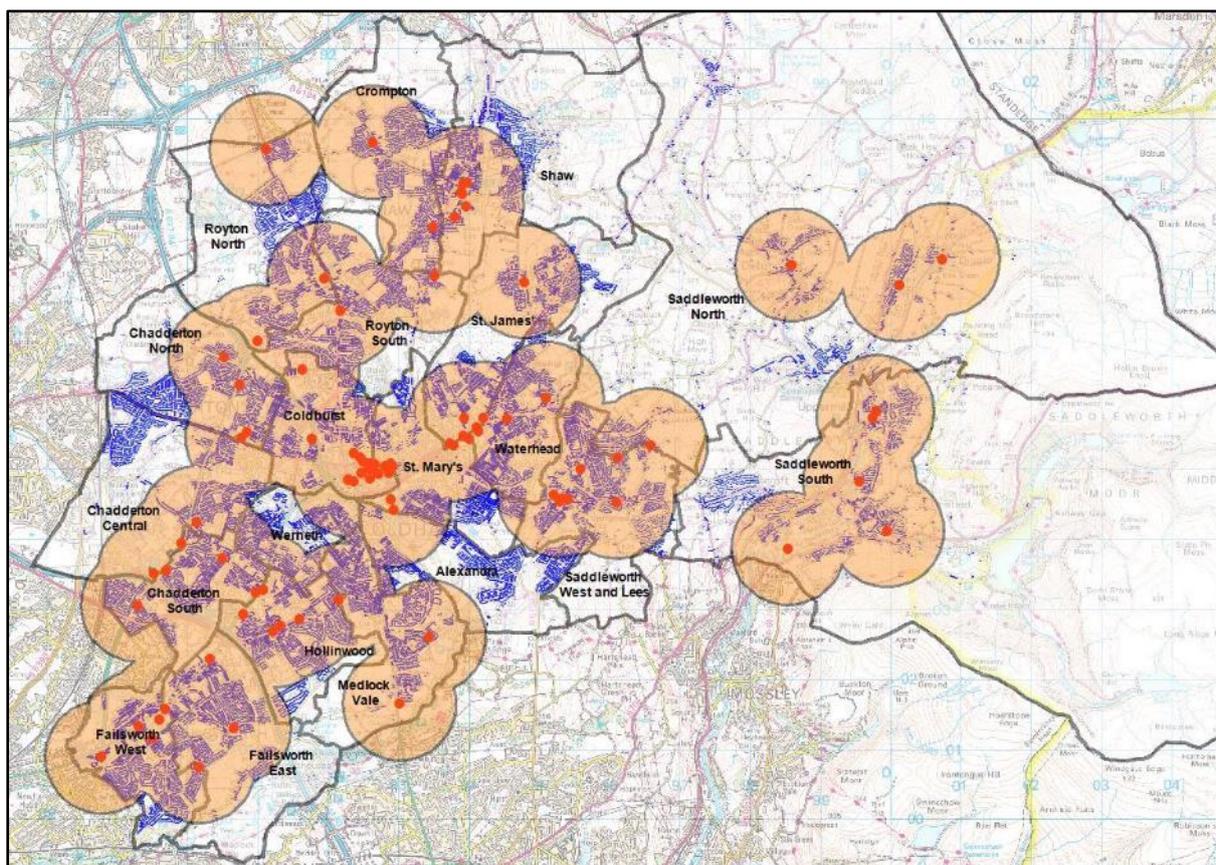
## Wi-Fi Hotspots & Libraries in Oldham

### Wi-Fi

Free public Wi-Fi ‘hotspots’ allow individuals who would otherwise struggle to connect to the internet, easy access. These hotspots also allow residents to access the web whilst away from home, potentially allowing them to complete tasks as they arise, rather than having to put them off until they return home. Hotspots can also be utilised by residents to maintain communication and engagement whilst out and about in the borough.

Oldham appears well-catered for when considering the Wi-Fi access points present in the borough (*Figure 24* illustrates a half mile radius around each to demonstrate areas which are within a conservative ‘walking distance’ of these points).

Central Oldham, Failsworth, and settlements in Saddleworth appear particularly well provided for, though gaps in this coverage exist - particularly in Alexandra, Holts, and the westerly section of Chadderton. The effect of a lack of Wi-Fi hotspots is likely greater in Alexandra and Holts, as they are more deprived areas than Chadderton. Individuals in Alexandra and Holts who do not have Wi-Fi at home may find it difficult to apply for jobs due to the increasingly online nature of job applications, and may also struggle to develop their online skills. Whilst good public transport links exist within Oldham, those individuals who do not have internet access at home are likely to be the same people who find the cost of public transport prohibitive, and in Holts in particular geographic position is likely to exacerbate this issue.



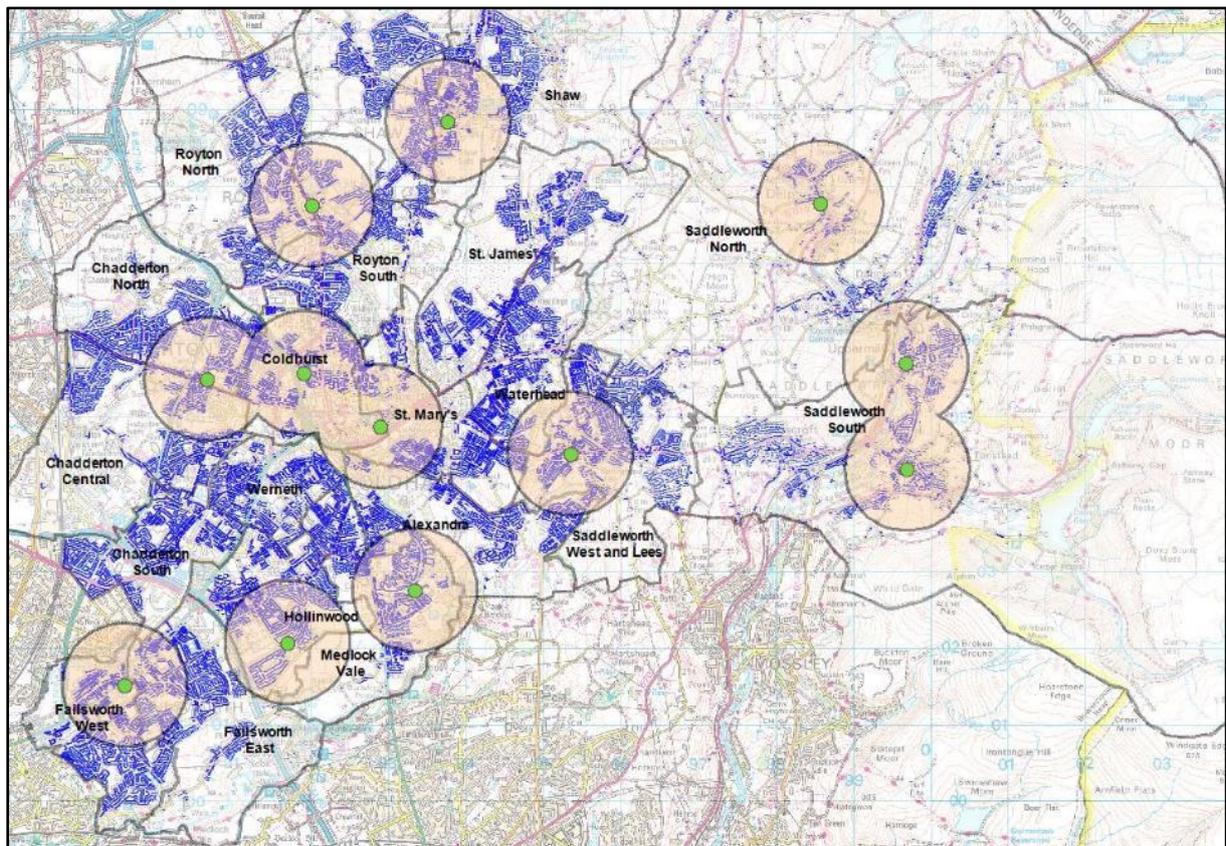
*Fig 24: Wi-Fi Hotspot Locations in Oldham. 0.5 mile radii drawn to reflect ‘easy walking distance’.*<sup>23</sup>

<sup>23</sup> OfCom Open Data & Analysis <https://www.ofcom.org.uk/research-and-data/data/opendata>

## Libraries

Libraries are an excellent resource for those who lack traditional laptop/desktop equipment, which is useful for tasks such as submitting job applications, and completing education assignments. Each location depicted in *figure 25* marks the location of one of Oldham's libraries with public ICT facilities (although, in some cases, this may be limited to just 1 or 2 workstations). A half mile radius has been illustrated around each location to illustrate what could be considered 'easy walking distance' from each site.

Most major areas of the borough have a library with ICT facilities in their centre, though there are some exceptions – Chadderton South, Werneth, Alexandra and St James/Waterhead all lack local access to such resources. Although each of these areas have good transport links with Oldham town centre (and hence the Central Library) this lack of resource could be seen as a barrier to those who do not have the means to access desktop sites at home.



*Fig 25: Locations of Oldham's Libraries. 0.5 mile radii drawn to reflect 'easy walking distance'.*

## Digital Industry Within and Around the Borough

Analysis has been undertaken at a Greater Manchester level on the prevalence of digital industry across the city-region, as well as the number of the skilled individuals which underpins them.

In terms of digital businesses units (of whatever description) in the area (*figure 29*), Oldham appears not to support many within its central wards, with some higher rates to be found in Chadderton on the western edge of the borough – possibly as a result of the business parks situated close to the M60 motorway – as well as in Saddleworth.

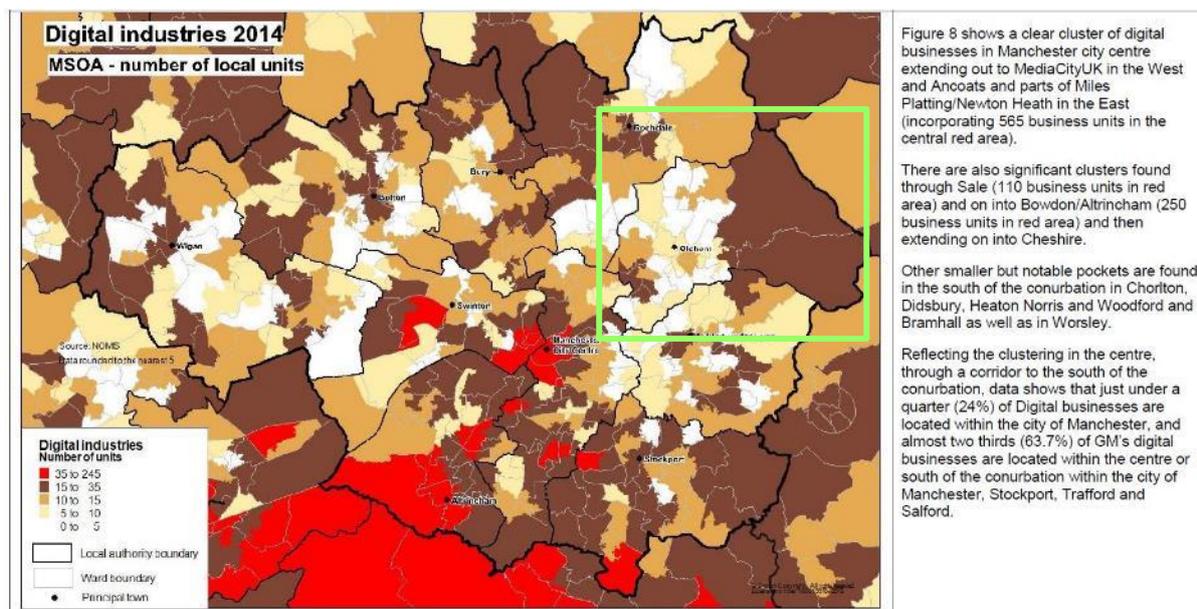


Fig 29: Digital Industries in Greater Manchester, 2014 (Oldham highlighted in green box)<sup>24</sup>

<sup>24</sup> Mapping and analysis taken from GM Deep Dive

<http://www.neweconomymanchester.com/media/1761/04-digital-creative-deep-dive-report-final.pdf>

Figure 30 appears to confirm that the latter is more likely to be made up of cottage-industry-type businesses. Meanwhile, denser groupings can be seen around Chadderton as well as in the very centre of Oldham. By contrast, Manchester and Salford take the lion's share of the industry in the region, with the majority of workers based around Manchester City Centre and Media City UK. Good levels of business enterprise are seen in the southern boroughs as well as across parts of Bury and Rochdale, which both have a strong concentration of skilled digital workers in one of their central wards.

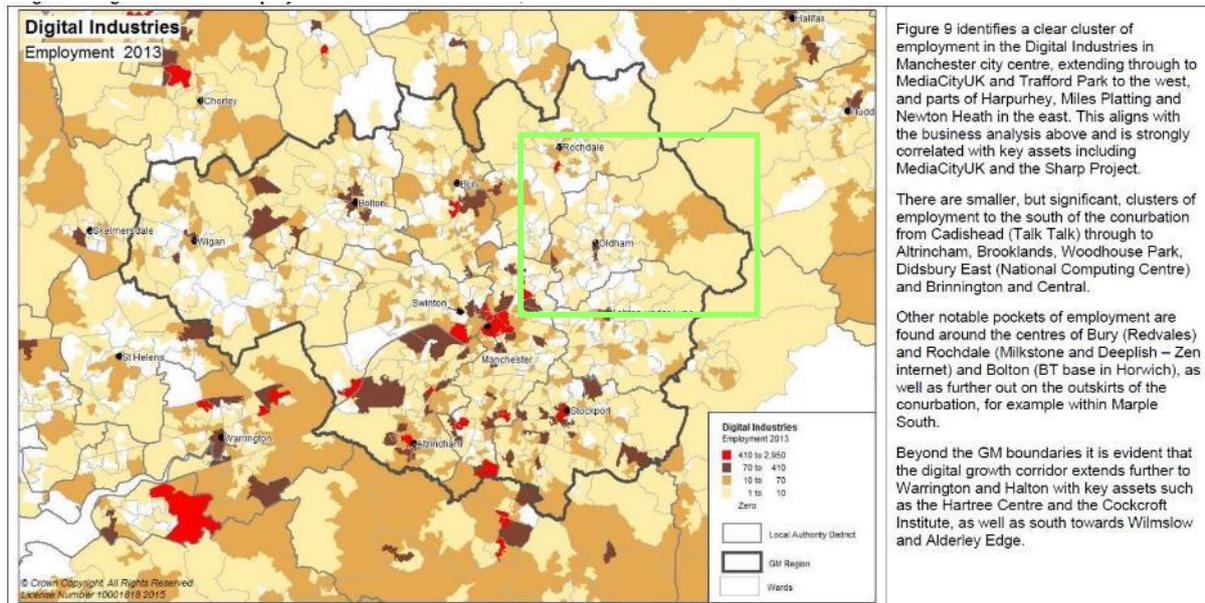


Fig 30: Digital Industries employment Greater Manchester, 2014 (Oldham highlighted in green box)<sup>25</sup>

## Selected Digital Enterprises

The following is a selective list of digital enterprises within Oldham.

- Inclusive Technology- leading supplier of software and hardware for people with special needs. Based in Saddleworth.
- Purple Wifi- international enterprise WiFi solutions with international footprint. Founded in Oldham, with a base in Chadderton.
- Web Applications UK- developers of web software suites, based in central Oldham.
- Pay360 by Capita- online payment solutions, based in central Oldham.
- Jobskilla-online training platform connecting the unemployed with training and support, based in Shaw.

<sup>25</sup> Mapping and analysis taken from GM Deep Dive

<http://www.neweconomymanchester.com/media/1761/04-digital-creative-deep-dive-report-final.pdf>

## Local Resources

### Hack Oldham

#### *What is it?*

Hack Oldham is a non-profit, community owned and operated, co-working and maker space, located in Oldham's Independent Quarter. A maker space is a community-operated, not for profit workspace, where people with common interests - often in computers, machining, technology, craft, science, digital art or electronic art, can meet, socialise, and collaborate.

#### *What does it offer?*

Co-working	Maker Space	Events
Flexible desk hire for start-ups, sole traders, and SME's, high speed internet, free refreshments, and an environment of likeminded people.	Public workshop facilities including 3D printing, laser cutting, electronics, reprographics, and a wide range of tools and equipment.	There is a wide range of events and workshops available. These include meet-ups and clubs, and cover topics such as STEM, textiles, and Minecraft.

One of the Events Hack Oldham offer is a "Digital Drop In". This is a chance to get help with basic IT questions, bring in your device for advice and tips, or get advice on what kind of device will suit your needs. You can find out how to get online, understand how to better use your phone, discover free software alternatives, and learn which device is right for you.

#### *Website*

[www.hackoldham.com](http://www.hackoldham.com)

## Key Points

- 10% of the working population in the North West have no Basic Digital Skills.
- 76% of those with no Basic Digital Skills are retired.
- 78% of individuals in the North West have all of the Basic Digital Skills.

## Digital Skills & Literacy

A recent report commissioned by Lloyds Bank and conducted by Ipsos Mori examined the 'Digital Skills' of the UK. Part of this was a set of 'Basic Skills', which are defined in *figure 26* below. These cover all of the basic ICT tasks an individual might be expected to carry out in any employment, to apply for a job, to participate in educational courses, or to complete personal administrative tasks and search for information or advice.

Category	Task	Can you..?
Managing information	Use a search engine to look for information online	<input type="checkbox"/>
	Find a website I have visited before	<input type="checkbox"/>
	Download/save a photo I found online	<input type="checkbox"/>
Communicating	Send a personal message via email or online messaging service	<input type="checkbox"/>
	Carefully make comments and share information online	<input type="checkbox"/>
Transacting	Buy items or services from a website	<input type="checkbox"/>
	Buy and install apps on a device	<input type="checkbox"/>
Problem solving	Verify sources of information I found online	<input type="checkbox"/>
	Solve a problem with a device/digital service using online help	<input type="checkbox"/>
Creating	Complete online application forms which include personal details	<input type="checkbox"/>
	Create something new from existing online images, music or video	<input type="checkbox"/>

Those who said they could do at least one task in each of the skills categories were classified as having full Basic Digital Skills.

Fig 26: 'Basic Digital Skills' as defined by Lloyds Bank Digital Inclusion Report 2018<sup>26</sup>

Whilst data is not yet available a council level, it is estimated that 10% of the working population in the North West, and 8% in the UK, do not possess any of the basic digital skills listed above. At the UK level, 76% of those with zero basic digital skills are retired.

On the other hand, 78% of individuals in the region possess the full suite of these abilities, compared with 79% nationally. When considering the financial implications of having basic digital skills, 71% of respondents agreed that the internet helped them to save money, whilst 66% concurred that using internet and/or mobile banking helped them to avoid overdraft fees. 68% of over 60s are identified as being 'online'.

There appears to be an aspiration to supply this type of intelligence to local authority level. We are attempting to obtain this, but to date there has been no publication.

<sup>26</sup> Taken from Lloyds Bank Digital Index Report 2018

<https://www.lloydsbank.com/banking-with-us/whats-happening/consumer-digital-index.asp>

## Key highlights from the North West

47%

Proportion of people who say they use the internet to manage and improve their health  
**UK average: 47%**

8%

Proportion of working population without full Basic Digital Skills  
**UK average: 10%**

14%

Proportion of people who could cope for more than three months following a financial shock  
**UK average: 12%**

71%

Proportion of people who say using the internet helps them to save money  
**UK average: 69%**

19%

Proportion of benefit claimants with low or no digital capability  
**UK average: 18%**

16%

Proportion of people who would struggle immediately following a financial shock  
**UK average: 17%**

66%

Proportion of people who say internet/mobile banking helps them to avoid overdraft fees  
**UK average: 66%**

68%

Proportion of those aged 60+ who are online  
**UK average: 72%**

35%

Proportion of people with low financial capability  
**UK average: 31%**

78%

Proportion of people with full Basic Digital Skills  
**UK average: 79%**

60%

Proportion of people who feel their digital skills have improved in the past year  
**UK average: 60%**

10%

Proportion of people with zero Basic Digital Skills  
**UK average: 8%**

Fig 27: North West Highlights from Lloyds Bank Digital Inclusion Report 2018<sup>27</sup>

<sup>27</sup> Taken from Lloyds Bank Digital Index Report 2018  
<https://www.lloydsbank.com/banking-with-us/whats-happening/consumer-digital-index.asp>

# Appendix A

## National & Local Targets & Measures

The current UK government has set out 7 areas in which they aim to improve the county's digital clout, with a particular emphasis on supporting the nation's industry post-Brexit. Culture, Media and Sport Secretary Karen Bradley MP gives the following as the government's main aims:

- **CONNECTIVITY - Build world-class digital infrastructure for the UK**  
To complete rollout of 4G and Superfast Broadband by 2020, with over £1 billion to be invested in 'full fibre' and 5G infrastructure.
- **DIGITAL SKILLS - Give everyone access to the digital skills they need**  
Adults to have free training in basic digital skills, and ensure specialist digital skills are promoted and supported.
- **DIGITAL SECTORS - Make the UK the best place to start/grow digital business**  
Encourage innovation-friendly regulation, invest in R&D funding and create conditions for AI industry to thrive and grow.
- **WIDER ECONOMY - Helping every British business become a digital business**  
To make sure businesses have the knowledge and means to access to the best digital technology and data to drive innovation and productivity.
- **SAFE & SECURE CYBERSPACE - Make the UK safe to live & work online**  
Introduce a new approach of Active Cyber Defence, using the skills, knowledge and expertise of GCHQ working with the UK's ISPs to provide a new level of protection.
- **DIGITAL GOVERNMENT - Maintain the UK as a leader in serving citizens online**  
Work, across government and the public sector, to harness the potential of digital to radically improve the efficiency of our public services and infrastructure.
- **DATA - Unlocking the power of data in the UK economy**  
Introduce GDPR and continue to improve public confidence in data's power and usage.

It is obvious that each of these elements will, in some way at least, affect Oldham in the near future if they do not already – economic growth is a particular focus of these aims and should be acknowledged as a blueprint for future growth in the borough.

More locally, Greater Manchester mayor Andy Burnham has set out a further seven, more specific, targets for the Combined Authority (figure 28) – many of which share features with those set out by the current government – to be reached in the coming 3-8 years.

Intelligence on how Oldham fits into this picture of is not yet obtainable, but will be included in this document once it is made available.

<b>Measure</b>	<b>Target</b>
<b>1. Growth and Productivity - GVA per job</b>	To grow GVA per filled job from £41,984 to £44,500 by 2020.
<b>2. Digital Skills - pipeline</b>	To reduce the percentage of GM digital businesses that report turning down work as a result of being unable to find the right talent of talent from 27% (2017) to 5% by 2020.
<b>3. Digital Inclusion – possessing basic digital skills</b>	Increasing the percentage of Greater Manchester residents that have all five basic digital skills (communicating, creating, transacting, problem-solving and managing information) from 78% (2016) to 82% by 2020
<b>4. Digital inclusion – basic digital skills usage</b>	Increase the percentage of adults who have used all five basic digital skills (communicating, creating, transacting, problem-solving and managing information) from 42% in 2017 to 60%, with no borough below 50%, by 2020.
<b>5. Growth and Productivity - Gender balance in digital companies</b>	To change the ratio of men: women among IT and tech workers in technical roles from 79:21 in 2016/17 to 60:40 by 2020, as a milestone to 50:50 by 2025.
<b>6. Digital Infrastructure – average download speed</b>	By 2022/23, the average download speed across fibre, cable, mobile and wireless will exceed 100Mbps, compared to a Q4 2017 baseline of 32Mbps
<b>7. Digital Infrastructure – fixed broadband speed</b>	Increase the percentage of premises in Greater Manchester with fibre to the premises from 2% to 25% by 2020

Fig 28: Table shows key digital objectives set out for Greater Manchester by Mayor Andy Burnham<sup>28</sup>

<sup>28</sup> Taken from GM-CA Digital Strategy 2018-2020

[https://www.greatermanchester-ca.gov.uk/download/meetings/id/2957/12a\\_digital\\_strategy](https://www.greatermanchester-ca.gov.uk/download/meetings/id/2957/12a_digital_strategy)