**Archwilio** Cymru
**Audit** Wales

# Digital inclusion in Wales

Report of the Auditor General for Wales

March 2023

This report has been prepared for presentation to the Senedd
under the Government of Wales Act 2006.

# Contents

# Summary

1    This report provides a high-level overview of issues relevant to digital inclusion in Wales. Digital inclusion is complex, and our report is not intended to be comprehensive. We summarise terminology, key data and interventions in Wales. **Appendix 1** provides more information about our work. We have also released a document alongside this report that sets out questions for public bodies to ask themselves as they consider their approach to digital inclusion.

2    In summary, our report highlights:

   • **7% of adults in Wales are 'digitally excluded'**, meaning they have not personally used the internet in the previous three months.[1]

   • the percentage of households with **access to the internet has steadily increased since 2012** but some groups in society are more likely to be excluded.

   • while there is enough data to suggest high-level trends, **there are data gaps** that make it difficult to give a complete picture and gain an understanding of the 'lived experience' of people who are excluded.

   • digital inclusion is **complex and is not simply an issue of access to technology**. It is not just an issue of rurality or just an issue for older people. Even when people have access and digital skills, some people may still prefer to access services face-to-face.

   • there is a trend of public bodies moving some of their services online, which has many potential benefits but also **risks disadvantaging digitally excluded people**.

   • While the UK Government is responsible for digital infrastructure across the UK, the **Welsh Government is investing in broadband infrastructure**.

   • the **Welsh Government has a specific mission around digital inclusion** and is investing in digital inclusion projects.

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1   Welsh Government, National Survey for Wales, 2021-22. Adults are defined as people aged 16 and over.

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The Welsh Government has invested heavily in improving broadband infrastructure and the past few years have shown how reliant many of us have become on good quality internet access. However, spending on infrastructure needs to be balanced with work to tackle the root causes of digital exclusion to manage the risk of creating a two-tier society when it comes to access to public and other services.

We have published a key questions document alongside this report to help public bodies reflect on their approach to digital inclusion.

**Adrian Crompton**
Auditor General for Wales

# Background

3    **Exhibit 1** defines terms used in our report. Our work follows several other reports related to digital inclusion, infrastructure and connectivity in Wales. These include, among others, our 2015 report on the Welsh Government's Superfast Cymru agreement with BT[2], the 2020 National Infrastructure Commission for Wales report on digital infrastructure strategy[3], and the 2022 Senedd Climate Change, Environment, and Infrastructure Committee report on digital connectivity.[4]

**Exhibit 1: definitions of key terms**



**Digital** is a term that describes internet or technology-based activities for example emailing, internet shopping or booking an appointment online.



**Digital exclusion** describes the challenges people face when they do not have access, skills or confidence to use the internet.

**Digital inclusion** is the opposite of digital exclusion. Being digitally included means being willing and able to use digital tools or services independently.



**Internet speed** is a key measure of how effective and suitable internet access is for users. The greater the speed, the more users and activities that can be accommodated using that internet connection.

**Upload speed:** the speed information moves from your device (phone or computer) to the internet. For example, uploading a document to send in an email.

**Download speed**: the speed information moves from the internet to your device. For example, loading a shopping webpage or watching a film on your tablet or computer.

**Megabits per second (Mbps):** the speed of an internet connection is measured in megabits per second. This is the standard measure for how fast information moves over the internet to your device.

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2   Auditor General for Wales, Welsh Government investment in next generation broadband infrastructure, May 2015

3   National Infrastructure Commission for Wales, Digital Communications Infrastructure in Wales, December 2020

4   Senedd Climate Change, Environment, and Infrastructure Committee, Digital connectivity – broadband, August 2022

**Exhibit 1: definitions of key terms**

**Broadband** is a way of connecting to the internet, which is seen as generally faster and more reliable than older internet connections.

The following describe types of broadband:

- **Asymmetric Digital Subscriber Line (ADSL)** was used mostly in the earlier days of the internet. Uses copper telephone lines. Depending on the line, ADSL speeds can be around 1-8 Mbps.

- **Broadband connections through fibre-optic lines**. Fibre can be used for the whole line (full fibre) or part of the line alongside copper. Quicker and more reliable than ADSL.

- **Superfast broadband** has no single definition but suggests faster internet access than ADSL. Can mean full-fibre or partly through fibre cabling. UK telecoms regulator, Ofcom and the Welsh Government define superfast as a speed of at least 30 Mbps.

- Ofcom defines **ultrafast** as broadband with download speeds of greater than 300 Mbps.

- **Gigabit broadband** describes an internet connection that can deliver speeds of 1 gigabit per second (Gbps). 1 Gbps is equal to 1,000 Mbps.

**Mobile based internet access** is another way people can gain access to the internet. It can be used alongside broadband or as an alternative to broadband. An example of mobile based internet access is using a 4G smartphone.

**2G/3G/4G/5G**: These numbered terms describe advancing 'generations' of mobile communications technology. 2G was the initial technology for mobile to allow calls and text messages. 3G added the option of accessing the internet. 4G and 5G use similar radio signal technology, but these newer generations can provide faster internet speeds.

**Satellite technology** is another way people can gain access to the internet. Satellite related broadband access can be used by businesses or individuals, and can be suitable in particular for more remote locations.

Source: Audit Wales

# Why digital inclusion is important

4    The internet has changed many of our everyday tasks. The benefits of using the internet were highlighted during the height of the COVID-19 pandemic when many people relied heavily on internet-based services. **Exhibit 2** shows how people can benefit.

**Exhibit 2: benefits of using the internet**

'I can connect with family, friends and communities'

'I can work from home'

'I can use the internet to access research, learning or education opportunities'

'I can access businesses online and/or my business can reach more people'

'Public services and organisations can share and/or collect information online'

'I can book or pay for services online'

'I can try and find the best offer or access a wider range of choices'

'I can access hobbies, culture and leisure activities'

Source: Audit Wales

5    Digital inclusion is important in the context of public services 'digitising'. This means moving services online and/or using technology to deliver services. Examples include virtual classrooms, online record keeping and online forms to access public services. For all organisations and sectors 'digitising' services, there is an inherent risk that the needs of digitally excluded people could be overlooked.

6    Our recent report on Poverty in Wales highlighted that shifting services online continues to grow in importance for councils, but digital exclusion remains a major challenge, especially for people who experience or live in poverty.[5] We found that most Welsh councils recognise the problem of digital inclusion, with 14 of the 22 having adopted a digital strategy and many of these focusing on tackling digital inclusion. However, only 12 councils were providing people with access to a digital skills inclusion programme.

7    **Exhibit 3** summarises the main reasons for people being digitally excluded. Digital exclusion can be a real problem, for individuals and for public bodies. It can make it more difficult to keep in touch with friends, family and organisations. It can mean that people miss key information from public bodies. And it can mean people miss the chance to take advantage of cheaper goods and services offered online.[6]

## Exhibit 3: main reasons for digital exclusion



### Digital infrastructure not available

- To get online and access the internet, people need broadband or mobile infrastructure to be available.
- The infrastructure needs to deliver sufficient internet speeds for everyday use.



### Can't afford to be digital

- There are people who can't afford electronic devices, sufficient data and/or broadband/mobile contracts.
- The rising cost of living risks excluding more people who can't afford digital devices or ongoing internet costs.

5   Auditor General for Wales, Time for change – Poverty in Wales, November 2022

6   Good Things Foundation, The economic impact of digital inclusion in the UK, July 2022. Good Things Foundation is a digital inclusion charity in the UK.

**Exhibit 3: main reasons for digital exclusion**

**Lack of basic digital skills**

- Some people lack the skills, motivation and confidence to use the internet.
- People need to know how to find support, training or learning to develop their digital skills.

**Accessibility, usability and language**

- Some people are excluded because they need additional help or different solutions to help them use and access technology.
- People need to be able to access technology using the language of their choice, including the Welsh language.
- Examples of tools to support accessibility include text to speech readers, translation services, larger fonts and other assistive technologies.
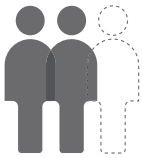
**Some people choose not to use digital services**

- Some people might have the access and skills but from time to time choose not to use digital services and choose to access services in person.
- There will always be some people who prefer not to be digitally included, which is of course their choice. This does not mean that they are necessarily digitally excluded, but by choice are not digitally included.

**Safety online can be a barrier**

- Some people might be excluded because they do not feel able or confident to use online services because of worries about online safety and security issues.
- Online safety as a barrier could be linked to affordability of secure technology.

Source: Audit Wales

# Data on digital inclusion – gaps and challenges

8    **Exhibits 4**, **5**, **6** and **7** summarise key data about digital inclusion in Wales. Some of the data focuses on access to digital and telecommunications infrastructure, while the National Survey for Wales provides data about whether people have personally used the internet in the previous three months.[7] However, there are limitations with this data. For example, the data relies on self-assessment and an imperfect definition of someone being classed as digitally included if they have personally used the internet once in the past three months. However, with the same question being asked over time, the data are still helpful in showing trends.

9    Ofcom[8] reports data and information about premises that can access broadband or mobile coverage as well as some data on take-up rates of full-fibre and superfast broadband.[9] This data helps provide key information about premises that can access internet services and the coverage of broadband networks. However, the data alone does not provide a complete picture of whether premises and individuals are fully exploiting the opportunities from the digital infrastructure available.

10   While the data suggests most areas of Wales have access to the internet, the reality on the ground for people using the internet may be quite varied. There might be data limits on phone packages, download limits on some broadband contracts or unstable connections. Cost of living pressures may also force people to reflect on the affordability of their current arrangements for internet access. Feedback we collated about people's experiences of using the internet highlights connectivity issues even when homes have access. For example, one person described how 'when we are using the internet it constantly loses connection …This can be frustrating as the issue can take several hours to be resolved.' Another person stated: 'I work from home a lot and at peak times of the day there is an impact on my internet speed'.

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7   Welsh Government, National Survey for Wales, 2021-22. While not without its limitations, data about whether people have used the internet in the last three months is a widely used indicator across the UK and beyond. It is an indicator used for example by the Office for National Statistics, Organisation for Economic Co-operation and Development and the University of Oxford.

8   Ofcom is the UK telecommunications regulator and has responsibility along with the UK Government for most telecommunications policy in Wales. Ofcom aims to make sure people get the best from their broadband, home phone and mobile services.

9   Ofcom's Connected Nations reports include data on communications infrastructure such as performance of broadband and mobile networks. The data reported covers the UK and Ofcom produce an annual Wales Report. Ofcom releases annual reports and two further updates each year.

11    Rurality has been a long-standing theme around digital connectivity challenges in Wales.[10] Ofcom's 2021 Connected Nations report (see **footnote 9**) highlights key differences in performance and availability of internet connections in rural and urban premises. Data sets can overlook the additional challenges and costs of delivering infrastructure transformation within the landscape of Wales. Data sets can also overlook the complexity of challenges in rural areas. In 2020, British Telecommunications plc (BT) produced a report about digital connectivity in rural Wales. The report highlighted evidence that infrastructure is only part of the picture and emphasised the importance of understanding the wider barriers to making greater use of the digital infrastructure which is increasingly available in rural areas.[11]

10 Welsh Government Farming Connect website, Digital disregard and inequality in rural areas, October 2020 and Cardiff University's Superfast Broadband Business Exploitation Project, Digital technologies and future opportunities for rural businesses and areas in Wales, January 2019.

11 BT, Smart rural – The utilisation of digital infrastructure by the agricultural and tourism sectors in rural Wales, September 2020

# Data on digital inclusion – what does the data show?

**Exhibit 4: data on who is digitally excluded in Wales in 2021-22**

In the Welsh Government's **National Survey for Wales**, people were asked about their **personal use of the internet** and whether they have used the internet in the last three months



**7%** of adults surveyed are digitally excluded
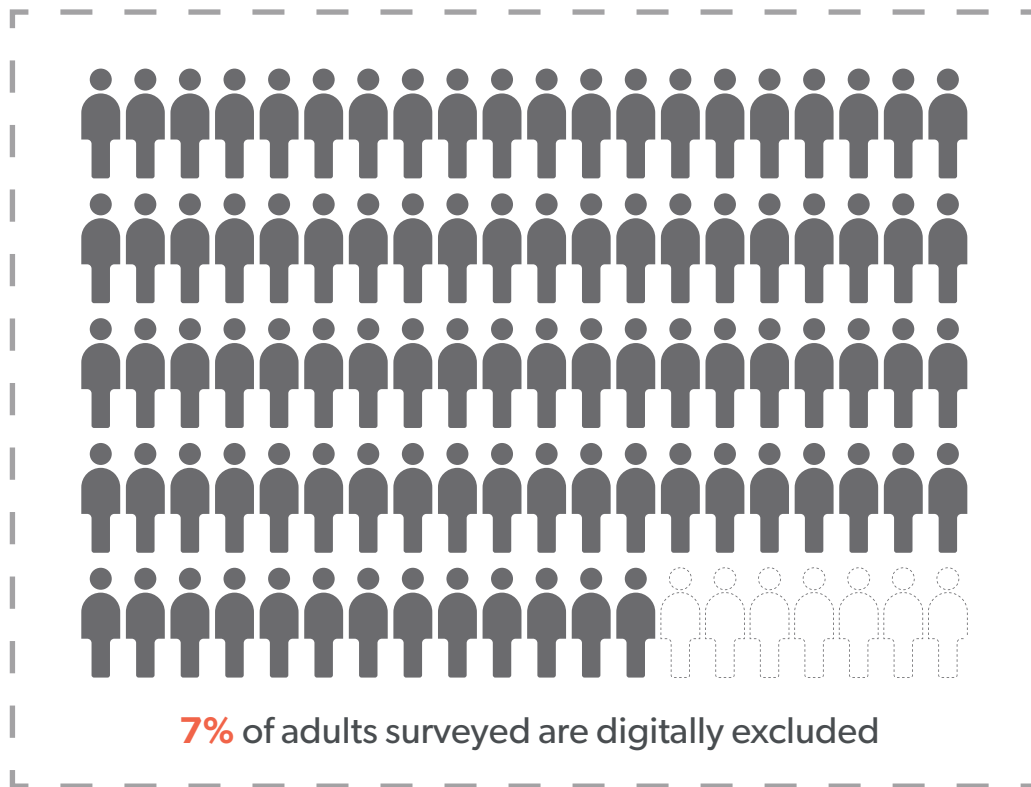
**32%** of people aged 75+ are excluded

**14%** of social housing residents are excluded

**12%** of those with a limiting long-term illness are excluded

Source: Audit Wales analysis of data from the Welsh Government's
National Survey for Wales, 2021-22

**Exhibit 5: data on digital skills in Wales in 2021-22**

In the Welsh Government's **National Survey for Wales**, people were asked if they had completed activities on the internet. These activities were then grouped into five digital skills categories below:

**1** Handling information and content

**2** Communicating

**3** Transacting

**4** Problem solving

**5** Being safe and legal online

**78%** of adults surveyed had accomplished **five digital skills** in the previous three months

**41%** of internet users **over 75** had all five digital skills compared to **89%** of internet users **aged between 16-49**

The percentage of people surveyed who had accomplished **5 digital skills** in past 3 months by age category
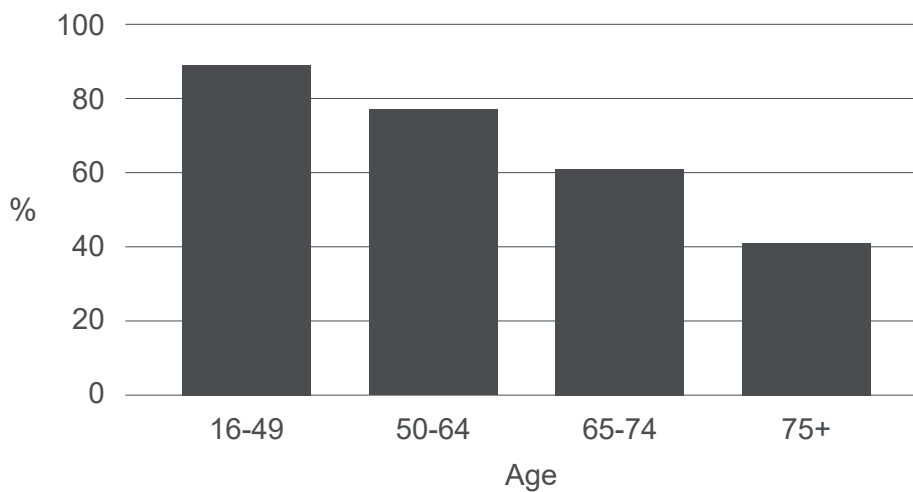


Note: The five digital skills are widely recognised across the UK and based on the essential digital skills framework developed by the UK Government. The framework is aimed at those involved in supporting adults to improve their essential digital skills.

Source: Audit Wales analysis of the Welsh Government's National Survey for Wales, 2021-22

**Exhibit 6: data on digital infrastructure in Wales**

The percentage of households that have access to the internet has **steadily increased** since 2012-13
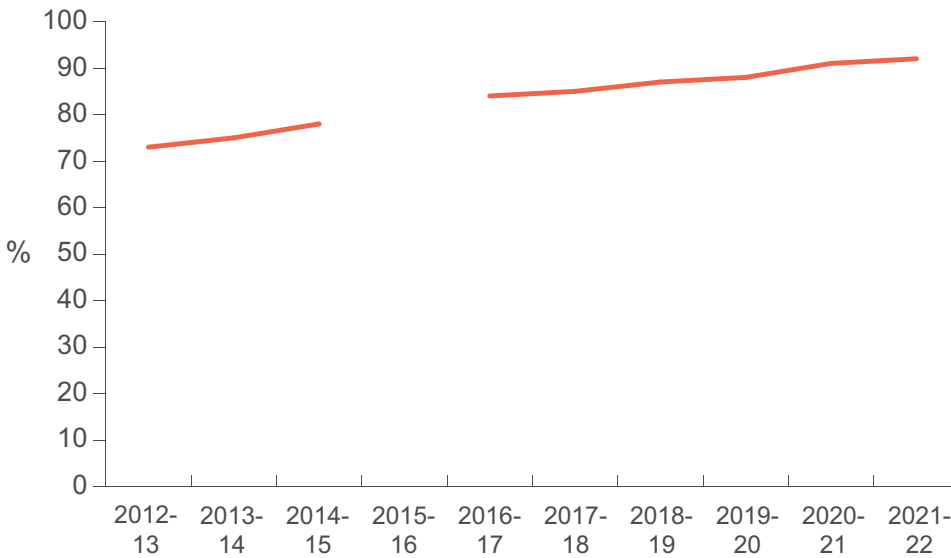


**Private rented** tenants and **owner-occupiers** were more likely to have access to the internet compared to **social housing** tenants in 2021-22
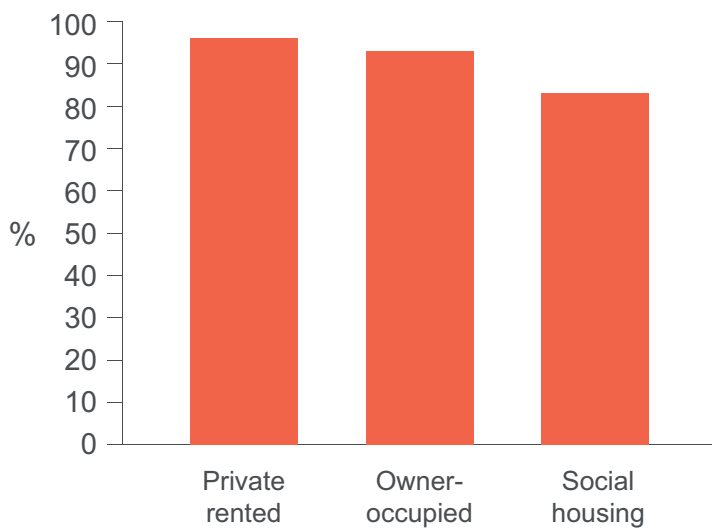


Note: No data was available for 2015-16 in relation to the percentage of households that have access to the internet. Access is defined as where people have the necessary connectivity to the internet and choose to use it.

Source: Audit Wales analysis of the Welsh Government's National Survey for Wales, 2021-22

**Exhibit 7: Ofcom data about premises in Wales where an internet connection is available**

Just under **10,000** premises cannot get a decent broadband service of at least 10 Mbps

**95%** of premises can receive superfast broadband

**52%** of premises can receive access to gigabit-capable broadband

**40%** of premises can receive full-fibre broadband

**33%** of rural premises are able to receive full-fibre broadband. This compares to **41%** of urban premises
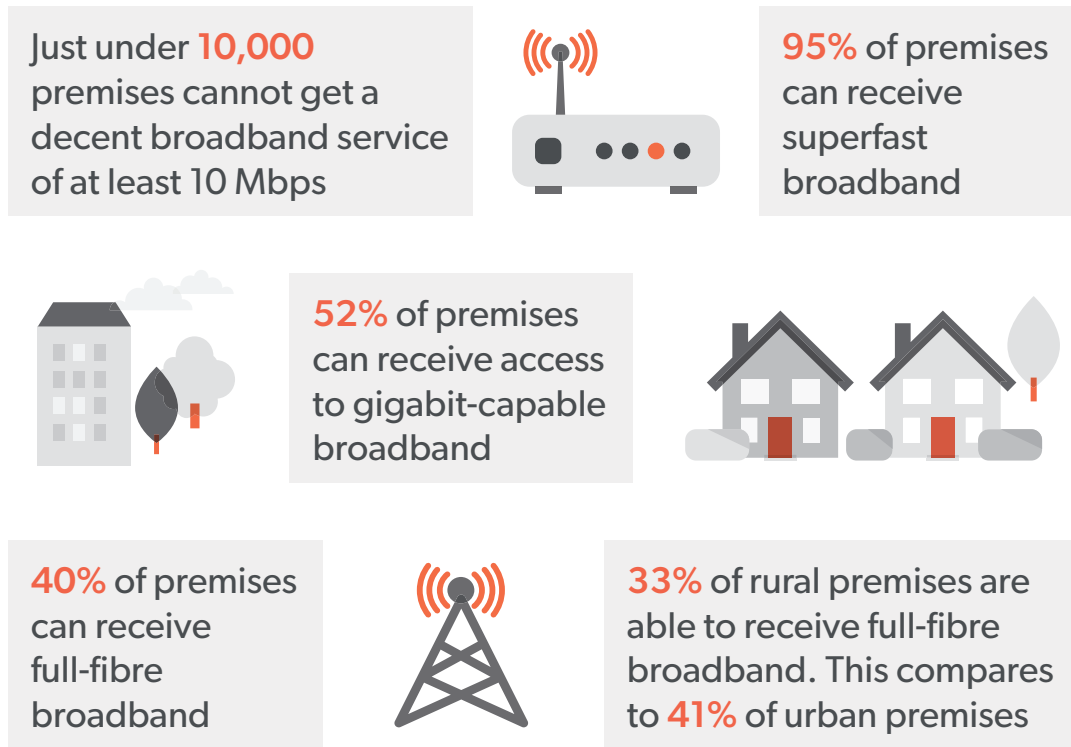
Note: Decent is defined by Ofcom as broadband services of at least 10 Mbps download speed and 1 Mbps upload speed from either fixed or fixed wireless networks.
While we have used data reported by Ofcom across the measures in this Exhibit, other live modelled data on broadband coverage for Wales, calculated using a different methodology, is published on the Local Broadband Information website. At 2 March 2023, that live data indicated superfast broadband coverage in Wales of 97%

Source: Audit Wales analysis of Ofcom, Connected Nations 2022 Wales Report, December 2022

# People's experiences of digital inclusion and exclusion

12    Digital inclusion is crucially about people and people's experiences. As part of this project, we made an appeal for people in Wales to tell us about their experiences of digital exclusion. **Exhibit 8** sets out some of the stories and experiences that people shared. We have included further extracts and information in **Appendix 2**.

**Exhibit 8: a sample of experiences that people shared with us**

"[Internet affordability is] a big issue … There was a time several years ago now when financially I was very stretched and lost access to internet when couldn't pay the bill. Fortunately, I was able to rectify this within a few weeks but the effect at the time was profound. "

**" I'm not always interested in accessing online services. I prefer face to face or speaking to someone on the phone. "**

"[The internet has] become part of life and somewhat a necessity … people are expected to do everything online. Every phone call is linked to a website and the automated service will initially guide you to [a] … website page unless you want to wait an hour on the phone or go over an automated service that cuts off or doesn't take you where you needed to go … Families struggle to provide phones for their children. You have to have a phoneline to have TV these days … and in the current climate people are talking about not running phone lines so children won't have access to internet at home unless they have a phone to access. "

Source: Audit Wales analysis of public responses to our call for case studies, issued via Digital Communities Wales's Digital Inclusion Alliance Wales

# The national strategy on digital inclusion

13    The Welsh Government's Digital Strategy for Wales[12] includes a mission on 'digital inclusion' to 'equip people with the motivation, access, skills and confidence to engage with an increasingly digital world, based on their needs.' The Welsh Government's Digital Strategy supersedes its Digital Inclusion Forward Look,[13] which set out aims to help people gain greater confidence in the digital world. In March 2022, the Welsh Government published a digital inclusion progress report, summarising its work to date in addressing the priorities set out in the Digital Inclusion Forward Look to tackle digital exclusion.[14]

14    In addition to the Digital Strategy, the Welsh Government has recognised the complexity of digital inclusion and the need for further research around the topic. For example, the Welsh Government has commissioned a project to look at a Welsh Minimum Digital Living Standard. The project team published an interim report, which summarised the work carried out since February 2022, with a final report due in early 2023. The project has considered the minimum features needed to be digitally included in Wales including, for example, type of device, internet access (broadband and/or mobile) and level of digital skills.[15]

15    Responsibility for digital inclusion policy sits within the Welsh Government's Financial and Digital Inclusion Team. This team chairs a Digital Inclusion and Skills Programme Board, which includes representatives from across the Welsh Government and external stakeholders, to discuss digital inclusion policies and issues. While individual public bodies have their own roles to play in promoting digital inclusion, including for example Digital Health and Care Wales, the Welsh Government is also providing additional funding to support delivery of its digital strategy through the work of Centre for Digital Public Services (CDPS) and the Digital Communities Wales (DCW): Digital Confidence, Health and Well-being programme. Other policy measures across the Welsh Government or steps taken by other public bodies may also contribute to digital inclusion. For example, the new Curriculum for Wales includes digital as a cross-curricula set of skills.[16]

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12 Welsh Government, Digital Strategy for Wales, March 2021

13 Welsh Government, Digital Inclusion Forward Look, December 2020

14 Welsh Government, Digital inclusion progress report: towards a digitally confident Wales, March 2022

15 Yates et al. (for the Welsh Government), Towards a Welsh Minimum Digital Living Standard: Interim Report, July 2022

16 Auditor General for Wales, The new Curriculum for Wales, May 2022

16    The DCW programme is a key Welsh Government programme for tackling digital inclusion. Cwmpas, formerly the Wales Co-operative Centre, delivers the programme in partnership with the Good Things Foundation and Swansea University. DCW receives £2 million annually from the Welsh Government's digital inclusion and health teams. This funding was initially in place from the start of the programme in July 2019 until June 2022 and has now been extended to 2025. DCW supports organisations to develop digital inclusion projects and to increase the digital skills and confidence of the people they support. DCW coordinates Digital Inclusion Alliance Wales (DIAW), which is made up of a multi-sector group of organisations. DIAW aims to coordinate, promote and shift the agenda around digital inclusion activities.

17    **Exhibit 9** sets out the four DCW key performance indicators (KPIs) and information about performance. Following the agreement to extend the programme, the Welsh Government and DCW agreed revised KPIs for July 2022 to June 2025, taking account of previous performance and other factors. **Exhibit 9** also sets out the revised targets for the period 2022-2025.

**Exhibit 9: summary of Digital Communities Wales performance since April 2021**

|  | Target April 2021 – June 2022 | Actual performance April 2021 – June 2022 | Target July 2022 – June 2025 | Actual performance July 2022 – September 2022 |
|---|---|---|---|---|
| **KPI 1** People supported to become digitally confident (motivation, basic skills and confidence) | 32,500 | 45,872 | 102,000 | 3,709 |
| **KPI 2** Volunteers providing support to citizens | 1,250 | 1,193 | 3,000 | 67 |
| **KPI 3** Support to ensure digital inclusion is recognised and embedded within organisational strategy and delivery | 35 | 44 | 55 | 2 |
| **KPI 4** Health and care, public, private and third sector staff supported to become digitally confident | 1,750 | 1,870 | 4,050 | 555 |

Note: performance against targets for July 2022 to June 2025 has been rebased to zero and does not include previous activity. When the contract with DCW first started in July 2019 there were nine KPIs. Following an independent evaluation, both parties agreed a revision to four KPIs. The original nine KPIs were reported between July 2019 and March 2021. The four new KPIs have been in effect from April 2021 to June 2022.

Source: Digital Communities Wales, Quarter Report – Key Performance Indicators, April to June 2022 and July to September 2022

18    The CDPS launched in June 2020, with the Welsh Government
      committing £4.9 million each year from 2020 to 2025 to fund its activities.
      CDPS works across the Welsh public sector and aims to encourage digital
      transformation and delivery of services around the needs of the people
      who use them. The Welsh Government set out in CDPS's term of the
      Senedd remit letter (2022 to 2026), the expectation that the CDPS would
      focus on themes including leadership and culture around digital policy,
      digitising public services, collaboration and digital transformation.

19    **Exhibit 10** shows CDPS's objectives and examples of activities to meet
      them. One example of CDPS's activities is a landscape review, part of
      which considered what organisations across Wales are doing to support
      people to get online. The evidence base included a survey of public bodies
      and any other organisation carrying out or involved with digital inclusion
      activities. The review also collected information and data from the Welsh
      Government and Digital Communities Wales. The output from the project
      summarised some comparisons of digital inclusion activities across the
      UK nations and beyond. The output of the digital inclusion activities
      survey is not yet publicly available, but the Welsh Government is looking
      to build on it and collect further information for release during 2023.
      The Welsh Government is developing an interactive map to be hosted
      on its website. The interactive map is aimed at organisations and trusted
      people to help those digitally excluded to find places where they can get
      help, for example, to develop basic digital skills, use a device or access
      the internet.

**Exhibit 10: Centre for Digital Public Services objectives and examples of activities**

**Examples of activities in 2021-22 to meet the objectives**

**Objective 1**

Help people in Wales to use modern digital services

- Used teams of digital experts to work in partnership with others, for example through showing best practice and providing skills transfer when developing public sector digital services.
- Developed and promoted Digital Service Standards for Wales, helping organisations meet the standards and build services that meet the needs of all users.

**Objective 2**

Prepare leaders for digital transformation

- Developed and delivered digital skills training for senior leaders. This included information around the benefits of digital services for end users.
- Held webinars and established 'Communities of Practice' networks, that aim to connect digital expertise and help support people working around digital in the public sector.

**Objective 3**

Stimulate innovation in our economy

- Designed plain English procurement templates to help the Welsh public sector when buying digital contracts or services.
- Showed Welsh suppliers the public sector's approach to 'procuring digital' with the aim that more Welsh suppliers win Welsh public sector contracts.

**Objective 4**

Build skills for digital engagement

- Developed a landscape review of digital inclusion initiatives in Wales (see **paragraph 19**)
- Used expert content designers who specialise in creating accessible content, to show examples to those delivering public services in Wales.

Source: CDPS's objectives as set out in their annual review Centre for Digital Public Services, Looking back: CDPS year in review 2021-22

# Improving digital infrastructure

20    Telecommunications and broadband infrastructure are reserved matters and therefore the responsibility of the UK Government and Ofcom. As such, the UK Government has taken steps towards funding infrastructure in Wales, for example through 'Project Gigabit'.[17]

21    Despite telecommunications infrastructure not being a devolved area, the Welsh Government has chosen to invest in broadband infrastructure over the past decade or so. An example is the Superfast Cymru programme that we examined in 2015.[18] Since 2015, the Welsh Government has continued to help fund or subsidise broadband infrastructure costs, for example through extending Superfast Cymru and other projects such as Access Broadband Cymru. The Welsh Government has provided such investment through economic development powers, aiming to fill gaps where it considers there have been gaps in investment from either the UK Government or the private sector.

22    The Welsh Government has carried out several market reviews to capture and analyse the premises in Wales that would benefit from existing commercial rollout of broadband investment. There are areas and locations in Wales where the private sector has judged it is not commercially viable to invest, and therefore public investment has been required to fund projects in full, or in part, alongside private investment. The Superfast Cymru agreement between the Welsh Government and BT from 2012 included over £200 million in public sector investment. Other examples of investment in broadband infrastructure include work between smaller telecommunications businesses and local authorities to improve connectivity in Wales. **Exhibit 11** provides an overview of key broadband infrastructure projects in Wales where the Welsh Government has contributed capital funding.

17 UK Government, Project Gigabit, first published in April 2022. This project funds 'gigabit-capable' broadband in all areas of the UK and includes a voucher scheme for rural areas.

18 See footnote 2

**Exhibit 11: key examples of Welsh Government capital investment in broadband projects since 2012**

| Project | Public funding | Objectives | Outcomes |
| --- | --- | --- | --- |
| **Superfast Cymru**<br>**2012 - 2018**<br>The original Superfast Cymru agreement between the Welsh Government and BT was announced in 2012. There have since been further phases to the work including Next Generation Access Broadband Wales, see below. | **£213.7 million** (actual) of which:<br>• £93.3 million – EU funding<br>• £67 million – UK Government<br>• £53.5 million – Welsh Government | The project aimed to provide superfast broadband to 95% (approximately 700,000) of premises within the intervention area by 2015. The number of premises and the timeframe was extended to 726,000 premises by 2018. | By the end of December 2014, 47% (346,000 premises) within the intervention area covered by the agreement could access superfast broadband. This had increased to over 730,000 premises in Wales by December 2018. |
| **Access Broadband Cymru (ABC)**<br>**2016 - 2023**<br>This Welsh Government grant helps fund or part-fund alternative broadband solutions for premises. Funding is based on eligibility criteria.<br><br>New connections must deliver a significant change in speed (at least twice the current download speed), with the new connection providing a minimum download speed of at least 10 Mbps. | **£10.5 million** (budgeted) – Welsh Government | ABC funding is specifically focused on helping premises that would otherwise not benefit from existing broadband infrastructure available through private sector broadband providers. | Our 2015 report noted the relatively low take-up of this grant. The National Infrastructure Commission for Wales (NICW) report included a recommendation for reviewing this scheme (see **footnote 3**). The Welsh Government accepted this recommendation.<br><br>A review of the approach to funding will be undertaken to ensure that all schemes, including ABC, meet the requirements of home and businesses across Wales. |

| Project | Public funding | Objectives | Outcomes |
| --- | --- | --- | --- |
| **Next Generation Access Broadband Wales**<br><br>**2018 – 2023**<br><br>A further example of a grant award to BT following a procurement process. Aiming to bring fibre broadband to premises in addition to those targeted in the Superfast Cymru agreement | **£57.0 million** (budgeted) of which:<br><br>• £36.2 million – EU funding<br><br>• £18.8 million – Welsh Government<br><br>• £2.0 million – UK Government | This project aims to enable premises to have access to full-fibre or 'fibre to the premises' broadband. The project aimed to help 39,000 premises to gain full fibre broadband access by March 2022 (now extended to end of March 2023). | The project has delivered access to gigabit capable broadband to 29,959 premises (position at the end of March 2022).<br><br>The Minister for Climate Change's July 2022 statement noted that the Welsh Government recognises the project has so far delivered less than the anticipated number of premises. The Minister noted some premises were de-scoped, for example those that gained access to gigabit broadband under other rollouts.<br><br>The Welsh Government forecasts that the total premises improved will exceed the 39,000 target when the project closes in March 2023. |

| Project | Public funding | Objectives | Outcomes |
| --- | --- | --- | --- |
| **Local Broadband Fund (LBF)**<br><br>**2019 - 2025**<br><br>Aimed at local authorities and social enterprises to help local communities gain access to faster broadband services. The emphasis is to support local solutions and innovation or creative solutions to connectivity challenges. Local authorities and social enterprises are encouraged to work together on applications but can also submit their own. Applications are sought every six months. | **£20.0 million** (budgeted) – Welsh Government | Aims to provide funding for local projects to deliver fast and reliable broadband to areas of Wales currently without access to 30 Mbps. | 11 projects have been funded by the LBF. The majority of projects received funding in the previous 12 months. All projects have differing timescales, ranging from 12 months to longer term timescales that will end in March 2025.<br><br>The spend and implementation to date for this project is described by the Welsh Government as slower than anticipated. The Welsh Government has cited the COVID-19 pandemic and applicants facing challenges with contracts as the cause of delays. |

Note: Appendix 1 explains our rationale for the scope of the broadband infrastructure projects that we have included. The figures cover capital investment and do not include revenue funding. Figures are budgeted values (due to projects being live), unless stated otherwise. The figures for Superfast Cymru are based on actual reported costs between 2012-2018. Figures are rounded-up to the nearest decimal point. The Superfast Cymru agreement also included a BT contribution, and the Welsh Government contributed a further £1.7 million towards Superfast Cymru communications. Openreach is a wholly owned subsidiary of BT Group and a legally separate business.

Source: Audit Wales summary of information provided by the Welsh Government. We have not audited this information. The Welsh Government's Written Statement on Superfast Cymru in December 2018, provided an update about the number of premises that have benefited from Superfast Cymru. The Welsh Government website sets out the full Eligibility Criteria for Access Broadband Cymru and further details about the Local Broadband Fund. Information about the ABC scheme review is detailed in the Welsh Government response to the National Infrastructure Commission for Wales Report on digital infrastructure, September 2022. Data reported on NGABW premises is outlined in the Minister for Climate Change's Written Statement: Update on Digital Connectivity in Wales, July 2022.

23    Our 2015 report focused on Superfast Cymru. The original agreement for the intervention area included a public sector contribution capped at £205 million, and £26 million from BT (£231 million total capital contribution). Outside of the agreement, BT also committed to invest around £19 million of capital expenditure and £82 million up to 2023 during the operational phase to support, operate and maintain the network. Variations in the capital contributions shown in **Exhibit 11** compared to the 2015 report reflect the extension of the Superfast Cymru agreement and the fact that we have now been able to include actual reported costs.

24    An element of the Superfast Cymru agreement between BT and the Welsh Government was a 'claw-back' arrangement. The terms of the 'claw-back' set out that if take-up exceeded 21% within the period to the end of 2023, then BT would distribute 50% of its profit margin on its wholesale services back to the Welsh Government. Some claw-back funding has already been used to help fund further phases of Superfast Cymru.[19] The Welsh Government is expecting to claw-back around £80 million in total.

25    Mobile phone-based internet infrastructure is also not devolved. However, the Welsh Government has developed a mobile action plan covering its work around the topic of mobile-based internet infrastructure with the mobile phone industry and Ofcom.[20] The UK Government funds a UK-wide Shared Rural Network programme focused on improving 4G coverage. The Welsh Government has not invested additional funding specifically to improve mobile phone coverage to date.

19  UK Government, Superfast Broadband Programme evaluation, first published October 2021

20  Welsh Government, Mobile Action Plan, October 2017

# Appendix 1 – About our work

## Audit question and scope

Our high-level review asked, 'What is the current extent of digital inclusion in Wales?'. As part of the project, we looked at the overall picture of digital connectivity in Wales including the Welsh Government's investment in broadband infrastructure and digital inclusion projects.

We have not carried out an updated detailed examination of Superfast Cymru since our 2015 report, because several other reports have since looked at that project. We have included a high-level summary of Welsh Government capital investment in some key broadband infrastructure projects, for example Superfast Cymru and Next Generation Access Broadband Wales. The rationale for our coverage was to focus on the role the Welsh Government has played in funding capital investment in Welsh broadband infrastructure as a key element of getting Wales connected to the internet to support digital inclusion. We have not considered other areas of the Welsh Government's investment around wider digital infrastructure or Welsh Government revenue funding of smaller projects in Wales as these were not directly linked to digital inclusion. For example, we have not looked in detail at the Welsh Government's contribution towards projects such as Public Sector Broadband Aggregation[21] or superfast exploitation business support.[22]

We have not examined commercial broadband investment, the role of the communications regulator Ofcom, or the technological merits of different internet connections, as these would not fall within the remit of Audit Wales. There are other UK projects around digital infrastructure and digital inclusion, for example Project Gigabit. We have not considered these projects as they are not funded by the Welsh Government. Our report will inform a shared learning event on the theme of digital later in 2023. During this forthcoming year, we will also be undertaking audit work looking at Local Government's digital strategies and vision. As part of our ongoing audit planning, we are considering the option of further work in future years to look at the implementation of the Welsh Government's Digital Strategy.

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21 The Welsh Government contributes revenue funding towards a cloud network for the public sector in Wales. The contract for managing and running the Public Sector Broadband Aggregation (PSBA) is currently held by BT.

22  Welsh Government, Superfast Business Wales. The Welsh Government offers support and advice for businesses to try and use digital connectivity opportunities.

# Methods

- **Document review**: We reviewed documents and research articles on digital inclusion. These included the Welsh Government's strategy, plans and delivery documents relating to digital and digital inclusion. We considered the evidence, reports and recommendations from various Senedd committees on and around the topic of digital infrastructure and digital inclusion, including the work of the Public Accounts Committee (Fourth Senedd)[23] and Economy, Infrastructure and Skills Committee (Fifth Senedd),[24] as well as the current Climate Change, Environment, and Infrastructure Committee.[25] We also considered other reports about digital inclusion, technology and digitising services from the Older People's Commissioner for Wales,[26] Wales Centre for Public Policy,[27] Nesta / Y Lab,[28] and National Infrastructure Commission for Wales (see **footnote 3**).

- **Interviews**: We interviewed officials from several Welsh Government departments. We also interviewed representatives of DCW, the Older People's Commissioner for Wales, the Equality and Human Rights Commission, Data Cymru, CDPS and Ofcom.

- **Data analysis**: We reviewed data from open sources including Ofcom and the National Survey for Wales. The National Survey for Wales is a Welsh Government survey involving around 12,000 people each year. Questions cover various topics, including internet, skills and media. Audit Wales recently released a data tool, which provides information about the context and challenges around poverty in Wales, and also includes information about trends of internet use across Wales.[29]

- **People's experiences**: With thanks to DCW for distributing our call for evidence to their DIAW. Our call for evidence was opened between 14 October 2022 and 14 November 2022. We received 51 anonymous responses.

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23  Senedd Cymru, Welsh Government investment in next generation broadband infrastructure – The Fourth Assembly, March 2016

24  Senedd Cymru, Digital infrastructure in Wales, February 2021

25  Senedd Cymru, Digital Connectivity – broadband report, August 2022. The report was debated and noted at a Senedd Plenary meeting, 17/11/2022. The debate included a response from the Welsh Government. The Welsh Government accepted all recommendations in the Committee's report.

26 Older People's Commissioner for Wales, Ensuring access to information and services in a digital age: Guidance for Local Authorities and Health Boards, September 2022

27 Wales Centre for Public Policy, What does 'blended' digital and face-to-face provision mean for access to services during the cost-of-living crisis?, November 2022

28 Nesta, Data Poverty in Scotland and Wales, April 2021

29 Auditor General for Wales, Tackling Poverty in Wales data tool, November 2022

# Appendix 2 – What people told us about their experiences of digital inclusion and exclusion

## Introduction

Our call for evidence (see **Appendix 1**) aimed to gather views, experiences and stories about people's experiences of using the internet. These are anonymous accounts from people in Wales.

We asked the following questions to people about their experiences of using the internet:

- Do you feel you have good internet that meets your needs?
- Do you feel you have the right skills and confidence to do everything you would like to do online?
- Have you ever had help to get online or use the internet? Or have you ever helped someone else?
- Do you use or contact public services such as council services online?
- Do you feel the cost of having the internet and/or mobile phone data is manageable for your household budget?

# Do you feel you have good internet that meets your needs?

Most people noted that they had **fast and reliable access to the internet** but even when people do have access to the internet, **the internet access is not always stable**

Some people highlighted **particular challenges** due to **living in a rural area**

Many noted the **importance of good internet** for **working at home**

"I live in a rural (area) and my **internet connection was poor** with very few options to improve the speed via internet service provider due to the modern infrastructure (fibre) not being in place and not likely to be in place for another 4-6 years. **I then took matters into my own hands and purchased a satellite service**. It is an absolute miracle device. We went from 2Mbps to 200Mbps instantaneously. It is an expensive service, but worth considering if you are a long-time sufferer of poor connectivity. We have dropped other services to help budget for the monthly cost "

"In part, although being rural it can be **difficult to maintain connection** and you never know when it might drop off which makes it **difficult to work at times** "

# Do you feel you have the right skills and confidence to do everything you would like to do online?

Most people felt **they have the skills and confidence**, but many identified areas where they might benefit from **further developing their skills and confidence**
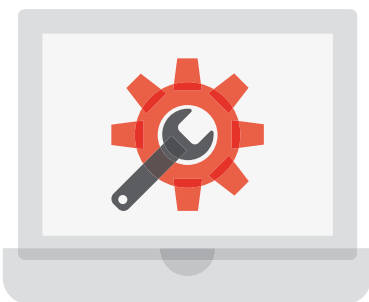
Some expressed their awareness around **future changes and developments in technology and the need to keep pace**

" Yes. Although I do feel as my son gets older and closer to using the internet and social media himself that **I might not have the necessary knowledge to keep him safe** "
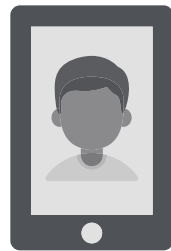
" **Yes and no. I do not have enough confidence to try new things** "

" Yes, pretty much. **And I know how to find out information if I need to do anything new**. However, I carry an anxiety that things are **moving very fast** and will soon **move too quickly away from my current skills and knowledge** "

# Have you ever had help to get online or use the internet? Or have you ever helped someone else?

Most people **access the internet without any help**, but many people play **key roles in helping friends, family and colleagues to use the internet and be digitally included**
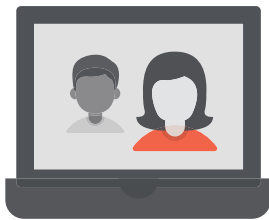
" Both.
**Needed help to resolve problems I was unable to solve**.
Also helped others to access internet, get online, set up router, log-in, set up accounts, download apps, etc. "

" Recently my elderly next-door neighbour was admitted to hospital where he spent 6 weeks in hospital following a fall and fractured hip. Due to ongoing (COVID-19) restrictions there was very limited visiting allowed on the ward.

The television on the ward (was) too far away for him to see properly and the channels that were put on mainstream TV he was not interested in watching.

He does not have the internet at home, no mobile phone etc and is reluctant to use / learn anything digital as 'he doesn't trust it'. As a result, (he) had limited contact with the outside world during his stay.

I wanted to try and help. He is an avid fan of cricket,  I set up a sports app and wrote out step by step instructions and provided him with a set of earphones to plug in so that he didn't disturb others with the sound. He's quite deaf and needs the sound on loudly to hear. Feedback was that this 'was a Godsend'  and helped alleviate his boredom, engaged him in what was happening and gave him something to talk about to others "

# Do you use or contact public services such as council services online?

Most people said **they use public services online,** however some highlighted **challenges in general with using websites**

Some respondents indicated that they **could use services online,** but have to or **chose to speak to someone instead**

**I use the local council website to arrange visits to the recycling centre**

Yes. **I generally use online first**. My doctor's surgery has online consulting so I complete a survey and a doctor calls me back. The experience has been positive

My first attempt is always to **get information or contact services online**. However, their websites are often rubbish and the only way to get answers or services is to telephone them

**Very rarely, again I prefer to speak to someone about any issues**

# Do you feel the cost of having the internet and/or mobile phone data is manageable for your household budget?

Most respondents said they felt **the cost was manageable however many highlighted concerns** and difficulties with affording the cost

Most respondents see the **internet as essential**

❝ It is an essential service just like one of your utilities (water, gas or electricity) you have to manage budgets accordingly. If budgets are tight then we have to prioritise the important things first. A connection to the internet for us in a rural location is our window out onto the world, it's our library, our school our hobbies, our entertainment and our health centre ❞

❝ **It's an essential for me so I need to make sure I budget for it** ❞

❝ **just about manageable. We are considering moving to 'sim only'** ❞

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