Berkshire Digital Infrastructure Group

Contents

Foreword

Nigel Lynn - Chair
CEO West Berkshire Council

Digital connectivity plays an important role in underpinning social and economic activity across Berkshire, and the UK as a whole, and local authorities can play an important part in its facilitation, promotion and investment.

My role as Chair of the Berkshire Digital Infrastructure Group is to cultivate successful collaborative working within the six Berkshire councils to ensure that Berkshire has leading edge digital infrastructure to support economic growth, support Government initiatives, allow communities and businesses to thrive, and to make it easier for Residents to access public services.

The diverse range of towns and rural areas across the county presents both challenges and opportunities in achieving the leading-edge digital infrastructure needed for business and communities to thrive.

Our current strategy incorporates multiple workstreams, targeting different aspects of digital connectivity from mobile, broadband, public access WiFi and 'Smart' technology, to allow Berkshire to develop into the place to be for businesses and residents and to entice further investment in the region.

With the growing multi-faceted approach to working, now is the time to support businesses and communities. We can help them succeed by supporting agile working and training which in term can contribute to reduced commuting, less traffic congestion and more flexible and inclusive job opportunities.

We want to make sure individuals in our rural communities are connected digitally as well and able to access education, jobs, health, social care and other public services, along with urban communities.

By sharing experiences and working together the Berkshire Digital Infrastructure Group will be best placed to develop digital solutions to keep Berkshire at the forefront of technology developments in the Thames Valley, creating great places to grow – for both businesses and residents.

Nigel

> ❞ **By sharing experiences and working together** ❞

Introduction

Lynne Wilson - Programme Manager
Berkshire Digital Infrastructure Group

We originally started as the 'Superfast Project' but we quickly realised that there were other areas where a collaborative approach to infrastructure could benefit residents and businesses and the Berkshire Digital Infrastructure Group was formed, comprising as representatives on our board from all 6 Berkshire local authorities as well as a strong working relationship with the Thames Valley LEP. Working together we want to create a truly Connected Berkshire.

We have worked to develop a series priorities and targets that allow us to monitor and focus on improving areas of digital infrastructure that benefit the whole of Berkshire. Whether that is identifying where rural communities have mobile 'not spots' and what we can do to eliminate them, or where schools across the region have low broadband speeds and ways to help them, we are working to equalise digital connectivity across the region. Project Gigabit is the next project that will bring Gigabit speeds to residents and businesses across the region.

This end of year report highlights the current projects we are working on and showcases the work we have done to

streamline and standardise processes to help make things slicker and easier, for both local authority colleagues, as well as residents and businesses.

As we have developed from a project into a 'group' we have recognised the external communications is key to businesses and residents be part of our journey to transform the region.

We have also undertaken our first 'digital inclusion' survey which is a great tool to help us identify areas where people struggle to access technology, to understand barriers to using digital services, and determine what types of training solutions we can provide to help people do more online, such as search for jobs or use public services.

Lynne

> **" working to equalise digital connectivity across the region "**

DIG Board

Nigel Lynn
Chair
West Berkshire Council

Savio De Cruz
Vice Chair
Slough Borough Council

Sam Robins
West Berkshire Council

Chris Mansfield
Bracknell Forest Council

Shasta Parveen
Royal Borough of Windsor
and Maidenhead Council

Martin Chalmers
Reading Borough Council

Jeannie Satchell
Wokingham Borough
Council

DIG Project Team

Lynne Wilson
Programme Manager

Amanda Carruthers
Digital Infrastructure
Project Officer

Rob Pocock
Project Communications
and Administration

DIG targets and goals

Targets

Increase Berkshire's full fibre coverage to

85%

by 2025

Eliminate connectivity **'not spots'** through technology

Optimise use of **Wireless** technologies and **Small Cell** technology

Establish a **Digital Inclusion** taskforce

Goals

Create the right conditions to **attract digital investment**
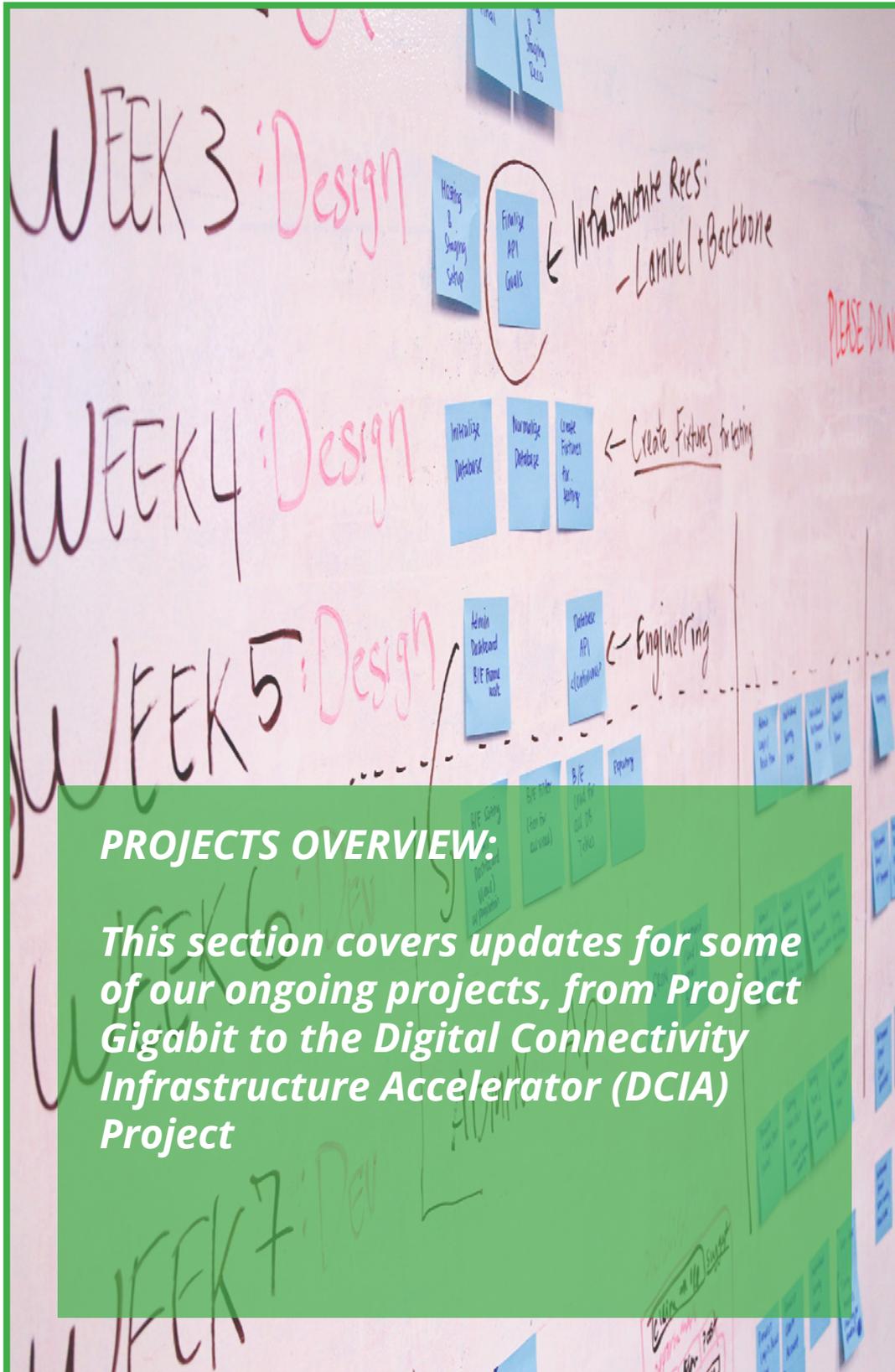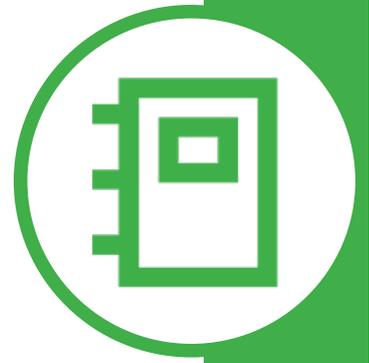
Create new **digital infrastructure** and assets

Ensure benefits are derived by **all 7 DIG** partners

Align activities **across multiple** programmes and strategies

Projects
Overview

PROJECTS OVERVIEW:

This section covers updates for some of our ongoing projects, from Project Gigabit to the Digital Connectivity Infrastructure Accelerator (DCIA) Project

Superfast Broadband

Project Lead: Amanda Carruthers
Project Start: December 2013
Project End: June 2023
Goal: 85% gigabit coverage by 2025

The roll-out of superfast broadband in the UK has primarily been led by private companies such as Openreach and Virgin Media.

The Government's policy is to support the roll-out of superfast broadband to those areas not reached by private investment.
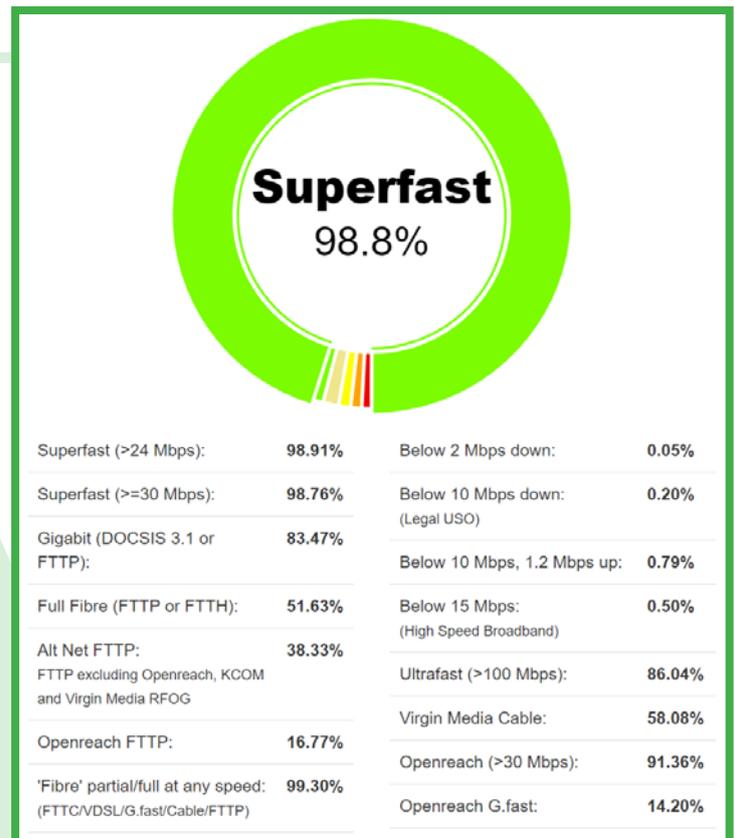
The superfast broadband programme was the Government's main programme for supporting these areas from 2010. The programme is ongoing but is in its final stages. It is managed by Building Digital UK (BDUK), part of the Department of Digital, Culture, Media and Sport (DCMS).

The Openreach delivery was completed in August 2022. A total of 4573 premisses were delivered to by Openreach across Berkshire. 1,408 of those premises received a Gigabit capable Full Fibre connection.

The Gigaclear delivery for West Berkshire and all remedial works was completed in April 2022. 8,437 premises in West Berkshire received a Gigabit Full Fibre connection via this contract.

Gigaclear's East Berkshire delivery is on track to complete by the end of March 2023 with 355 premises remaining that need to be delivered to. To date 5,115 premises have received a Gigabit Full Fibre Connection in East Berkshire.

Further support for areas without superfast broadband is now delivered through the Government's policies on gigabit-capable broadband.

Superfast 98.8%

Superfast (>24 Mbps):	98.91%	Below 2 Mbps down:	0.05%
Superfast (>=30 Mbps):	98.76%	Below 10 Mbps down: (Legal USO)	0.20%
Gigabit (DOCSIS 3.1 or FTTP):	83.47%	Below 10 Mbps, 1.2 Mbps up:	0.79%
Full Fibre (FTTP or FTTH):	51.63%	Below 15 Mbps: (High Speed Broadband)	0.50%
Alt Net FTTP: FTTP excluding Openreach, KCOM and Virgin Media RFOG	38.33%	Ultrafast (>100 Mbps):	86.04%
Openreach FTTP:	16.77%	Virgin Media Cable:	58.08%
		Openreach (>30 Mbps):	91.36%
'Fibre' partial/full at any speed: (FTTC/VDSL/G.fast/Cable/FTTP)	99.30%	Openreach G.fast:	14.20%

Project Gigabit

Project Lead: Lynne Wilson / Amanda Carruthers
Project Start: March 2021
Project End: December 2030
Goal: Gigabit-broadband to be available nationwide by 2030

Project Gigabit is the UK Government's £5 billion mission to deliver lightning-fast, reliable broadband to homes and businesses across the UK.

The Government has committed to support delivery of gigabit-capable broadband to the 20% hardest to reach premises in the UK, starting with those that do not have access to superfast broadband.

Gigabit-capable broadband is now available to over 72% of the UK. That's nearly 22 million homes and businesses.

Vouchers are also available to support the cost of installing gigabit-capable connections in rural areas.

Berkshire has been included in three procurement 'Lots' that will see an area of the county benefit from better broadband coverage.

These 'lots' are:
◊   West Berkshire Lot 27 (Hampshire): approximately 600 properties fall into the Hampshire Lot and the estimated contract award date for this is April to June 2023.
◊   East Berkshire Lot 26: this 'lot' is currently in procurement and the estimated contract award date is July to September 2023.
◊   West Berkshire Lot 13C: this 'lot' will be one of the first areas that have been identified for inclusion in the newly proposed, cross-regional supplier framework for the project.

More information about Project Gigabit and any recent updates are available on the Government website: projectgigabit.campaign.gov.uk/

Superfast 30 Mbps and faster

Generated: Tuesday 4th April 2023

UK	England	Northern Ireland	Scotland	Wales
97.5%	97.8%	95.5%	95.4%	97.1%

Full Fibre - Fibre to the Premises

Generated: Tuesday 4th April 2023

UK	England	Northern Ireland	Scotland	Wales
49.4%	48.6%	90.6%	46.0%	45.3%

The generated date is when coverage was at the figures quoted. There is a small amount of lag between broadband infrastructure providers making services available and appearing in the statistics. For VDSL2/FTTC services this is around 2 to 4 weeks, and for FTTP (full fibre) a further couple of weeks should be allowed. If you have a service available and our searches do not indicate it is do feel free to report an addition.

We aim to update the coverage percentages weekly, with the underlying service availability for postcode searches changing several times in a week.

The Governments 95% superfast target is based on the over 24 Mbps definition for superfast services.

Full Fibre for Schools

Project Lead: Lynne Wilson / Rob Pocock
Project Start: January 2021
Project End: June 2023
Goal: 64 Schools connected before June 2023

The roll-out of superfast broadband in the UK has primarily been led by private companies such as Openreach and Virgin Media.
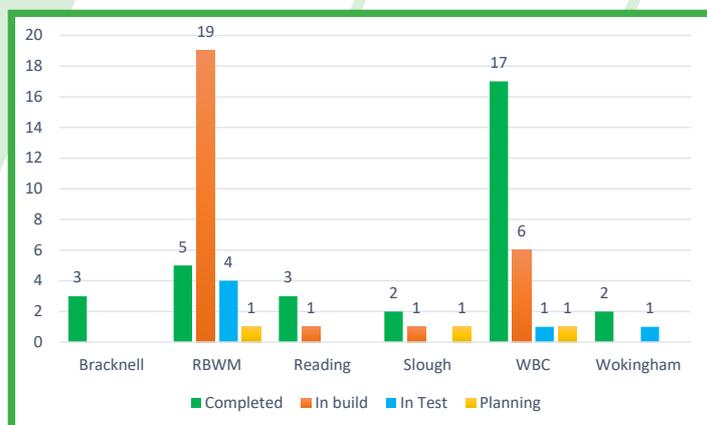
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"The new infrastructure will help the Children see technology at its best.

It'll mean that Assembly's, even on Zoom, can go back to being in real time rather than pre-recorded and viewed from the server.

For me, it's about transforming the use of technology in school, for pupils and staff, so that it becomes as relied on as other utilities, such as electricity or gas."

John Mickelwhite
Head Teacher
Birch Copse Primary School

	Bracknell	RBWM	Reading	Slough	WBC	Wokingham
Completed	3	5	3	2	17	2
In build		19	1	1	6	
In Test		4		1	1	1
Planning		1		1	1	

Berkshire Digital Connectivity Infrastructure Accelerator (DCIA) Pilot

Project Lead: David Janusz
Project Start: April 2022
Project End: December 2023
Goal: Pilot progression to next phase

The DIG partnership with the 6 authorities, Asset Market and CJ Founds Associates successfully bid for central government funding to pilot the effectiveness of developing, testing and implementing a digital platform to centralise potential assets for the use of locating mobile technology

This funding has created the foundation to fulfil that goal and build evidence around the benefits and efficiencies of a digital asset platform, driving consistency in asset data standards and the importance of 4G/5G connectivity engagement with Estates, Legal, Highways and Planning teams.

The DCMS DCIA Pilot has developed and tested the effectiveness of an asset platform and workflow management system to accelerate the mobile network operators acquisition process. The alignment of the DCIA pilot and DIG strategy to test the adoption of an asset platform that Authorities can confidently utilise with suppliers and MNO's which delivers consistency across all 6 local authorities and directly support one of the three components of the DIG Digital Strategy; to increase the coverage of 4G/5G connectivity across the Thames Valley region.

The project has demonstrated with the local authorities, Asset Market (digital platform provider) and multiple mobile network suppliers the process required to digitise elements of the site acquisition process.

Berkshire Digital Connectivity Infrastructure Accelerator (DCIA) Pilot (cont.)

Project Lead: David Janusz
Project Start: April 2022
Project End: December 2023
Goal: Pilot progression to next phase

The project has built evidence of whether the use of a digital asset management platform enables more efficient industry access to public sector assets and whether it encourages deployment of infrastructure in the region.

The pilot has developed potential commercial models and the economic viability of running a digital asset management platform from a Local or Regional Authority, understanding and recognising constraints in affordability for both public sector asset owners and telecommunication infrastructure providers.

Increased the development of the partners expertise and understanding of what resource are required to expedite telecommunications infrastructure deployment. This has included an assessment of the resources required internally to support the deployment of telecommunications infrastructure through this pilot including asset data discovery and management. The project has demonstrated the application of a digital asset management mapping platform across a diverse range of geographies (urban, suburban, rural) and socio-economic profiles (industrial, agricultural, leisure, business or residential etc) and tested with the platform with multiple asset types (e.g. local authority owned land, buildings and streetlights).

Work Streams
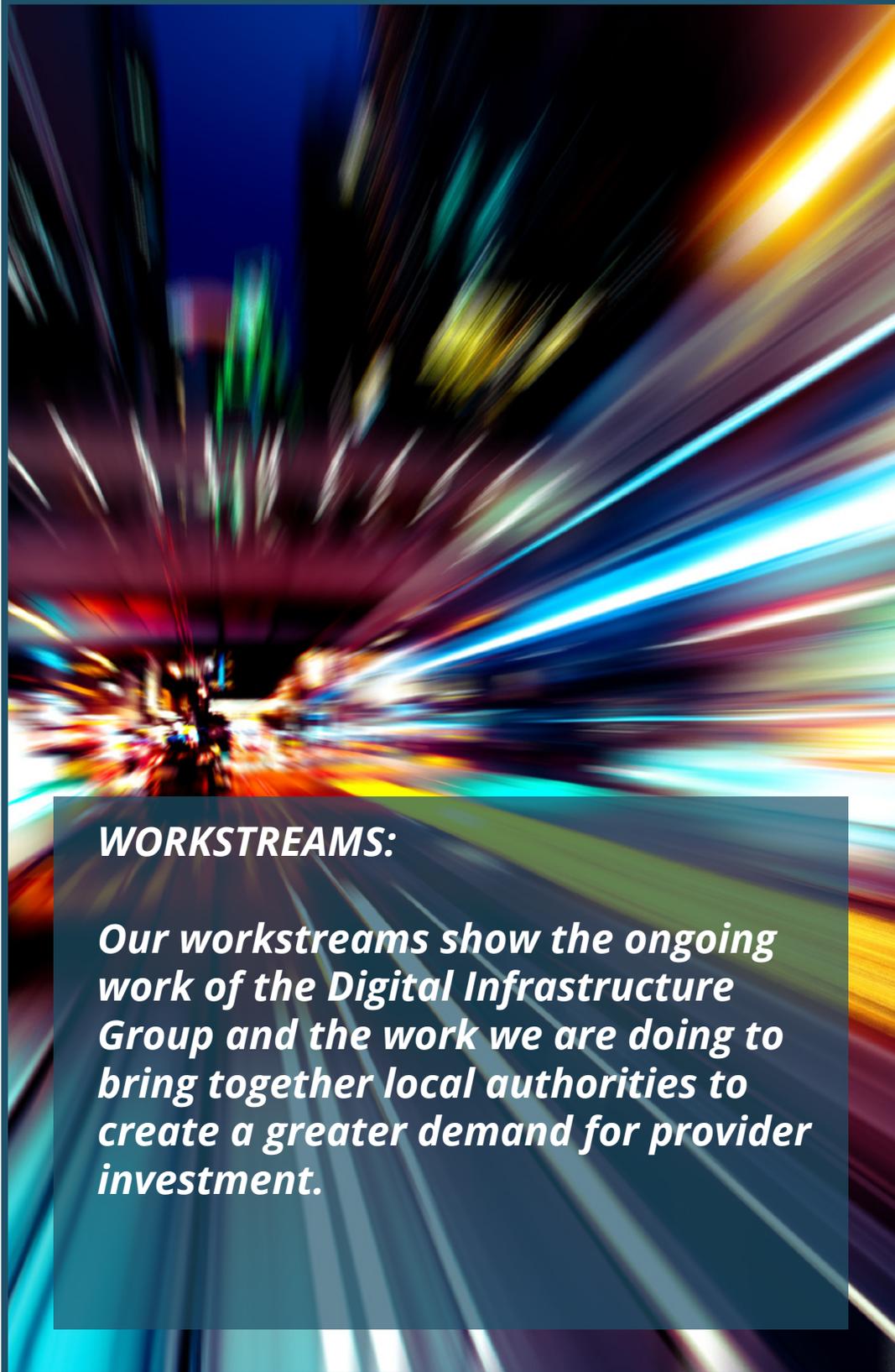
WORKSTREAMS:

Our workstreams show the ongoing work of the Digital Infrastructure Group and the work we are doing to bring together local authorities to create a greater demand for provider investment.

Workstreams

In 2021 we established a working relationship with C J Founds to assist in implementing our digital strategy, the following workstreams have been identified as key workstreams required in order to meet our goals.

WORKSTREAM 1

Digital Adoption

This workstream seeks to support and build awareness at all levels across each partner Authority. The initial focus will be working closely with Economic Development and Development Planning Teams to raise awareness of the importance of digital infrastructure. This will help to promote and highlight the various activities across the Thames Valley.

This will enable demand to be identified and help establish a framework of monitoring and interventions, identifying areas where support is most needed.

WORKSTREAM 2

Infrastructure Enablers

This workstream focuses on identifying opportunities to align Local Authority capital and development programmes and the wider fibre deployment being undertaken by the market across the region, as we undertake this initial commission. These create significant opportunity for Dig Once and for collaborative working, to coordinate activities and to achieve cost savings and reduced disruption. be sustainable and used for future infrastructure delivery. A coherent Dig Once strategy should sustainable and survive much further past its intended initial project focus.

WORKSTREAM 3

Asset Knowledge

Establishing a comprehensive database and interactive asset map of all existing full fibre coverage is key in maximizing the use of Council assets to expand mobile coverage across the region. The asset mapping will also identify and extend the work completed as part of Workstream 2. This will establish a knowledge base that will help inform discussions with the Market, support future developments in terms of digital provision and allow Authorities to target specific intervention areas. The outcome of this Workstream will be an interactive open-access GIS based map that incorporates spatial data. .

Market Engagement

We have established a comprehensive dialogue with Suppliers and market operators to help early identification and discussion around investment plans to help understand, influence and shape market investment across the region.

Meeting quarterly with key players from the Market we have gained a better understanding of investment decision making, collaborative working and barrier busting. This will enable more structured discussions to take-place with Government and create a collective common understanding of activity across the region.

Digital Prospectus

A central "home" for all the workstream outputs such as best practice advice, policy guidance and will be a reference for data sources and asset information that we may choose to make available to the Market.

The Digital Prospectus will allow the DIG Authorities to provide a strong signal to the market that we are "open-for-investment" and will actively support network expansion and roll-out through the policy and legislative tools available to Local Authorities.

Technology Themes

We are investigating emerging technologies offered by the market to establish a clear approach for interventions in areas such as Rural and Urban locations.

We are reviewing different technologies capabilities and use cases that can be implemented across the region to ensure maximum benefit is gained. We will also assess the possibilities for testbeds and pilots for mobile connectivity across the region.

Digital Adoption Strategy

Workstream lead: Nathan Spilsted
Status: Green
Workstream Start: September 2022
Workstream End: May 2023

Having a well-defined and agreed approach to digital adoption will drive positive change. A Digital Adoption Strategy is being developed that will translate digital adoption ambitions into a holistic, cohesive strategy that will raise awareness, maximise the potential for the provision of digital infrastructure in new projects, developments, and strategy, and ultimately drive demand.

The scope of the Digital Adoption Strategy is centred around the strategic approach to digital by each DIG authority's economic development (ED) function. It will draw up a set of key interventions for implementation by the DIG authorities, with DIG support.

Stage One - Discover completed in January 2023. It reviews each authority's plans and strategies for economic development, supplemented by a series of workshops held with the ED teams between November 2022 – January 2023. Interventions are suggested in four key areas: Governance, Awareness, Skills and knowledge and Place based infrastructure interventions.

Stage Two - Define is in progress. This is developing a framework based on Stage 1 including defining the likely benefits and resource requirements to facilitate a decision on which of the recommended interventions to take forward for implementation by the DIG authorities with DIG support.

Communications
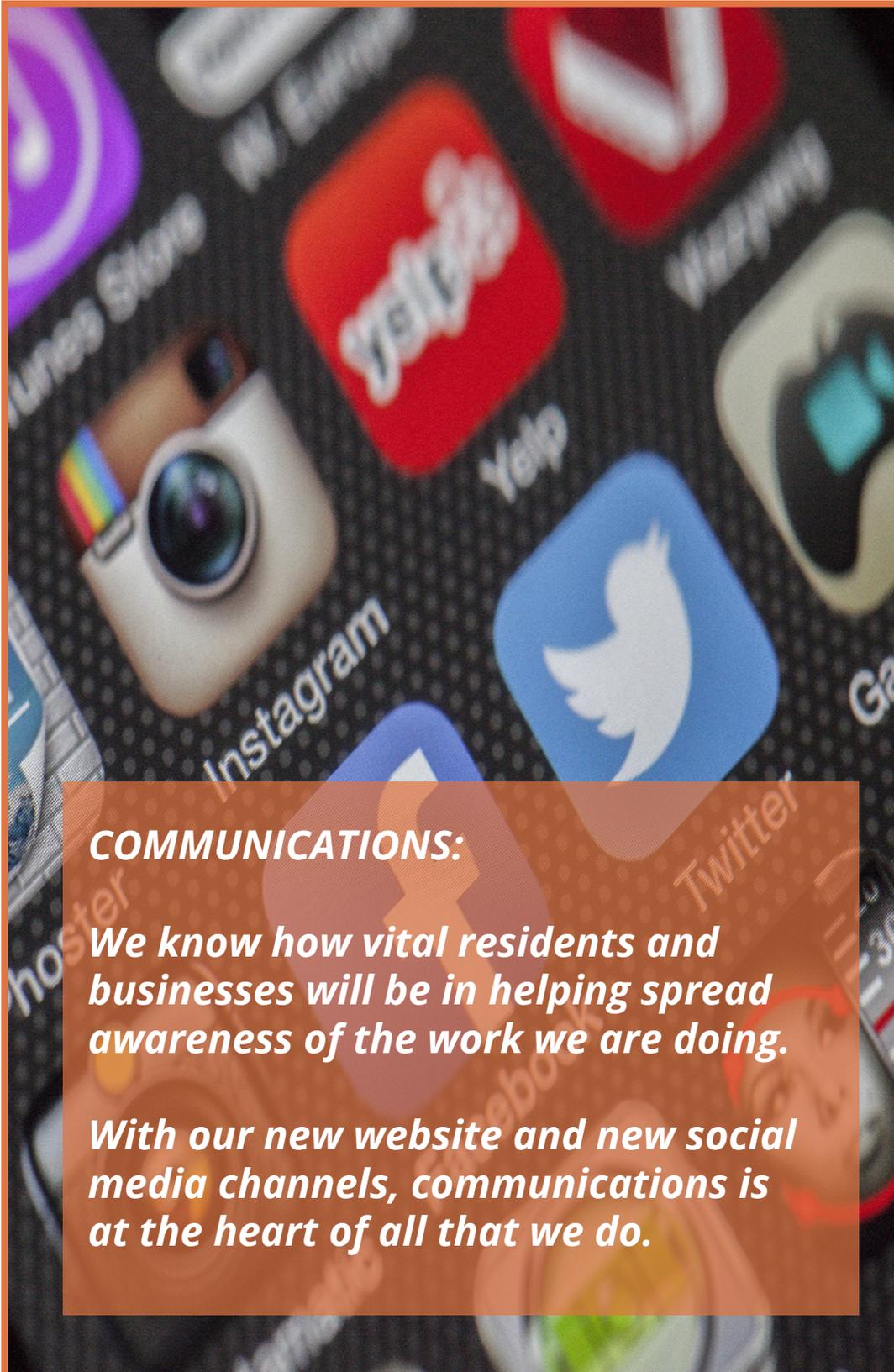
COMMUNICATIONS:

We know how vital residents and businesses will be in helping spread awareness of the work we are doing.

With our new website and new social media channels, communications is at the heart of all that we do.

Communications

Rob Pocock
Project Communications and Administration

This year we have started to communicate our purpose and projects more and more – both internally and externally. The main aim was to provide a wider understanding of who the Berkshire Digital Infrastructure Group is, how it works and what we are here to do, so that colleagues and teams across the local authorities knew we existed. The second aim was to also let residents and businesses know, so that they were aware of how our work was helping the region both now, and in the future.

This year we have launched a new website, developed an external presence across multiple social media platforms and conducted 2 residents' surveys with help from Communications colleagues across each local authority.

The Digital Infrastructure Group (DIG), creating a joined-up approach to the challenges faced by current infrastructure restrictions across Berkshire.

Read more about Connected Berkshire →

We launched and internal newsletter aimed at increasing awareness within the councils to keep stakeholders and partners up to date with both project work as well as strategic opportunities and news relating to digital infrastructure.

Developing a following and growing our audience has been a particular challenge but one that we will face head on to increase residential following that is better aligned to that of local authorities. Our most followed social media channel is Twitter but that is more of a corporate following. We want to drive 'likes' and 'friends' on Facebook as that is where we have a better opportunity of reaching residents – and we need local authority assistance to do this.

Our website traffic has grown steadily and continues to grow as more visitors share our content – our most visited section is Connected Berkshire. We have established a new Blog and want to introduce an externally available newsletter by next year to allow even more opportunities to share news and developments directly with residents and businesses.

The following pages show a breakdown of our social channels, interactions and some results from our two surveys, to give an overview of how we have shared our content.

We look forward to continuing to share important news and updates in the places where people 'play' to keep them informed of important digital infrastructure updates and developments across the region.

BerkshireDIG.org.uk

This year we launch our new website - a key channel in creating our online brand and presence. Our blog has been developed to share key messages and themes that affect everyone - not just Berkshire.

Page views and visits

The below information shows the types of devices viewers are using when engaging with our website.
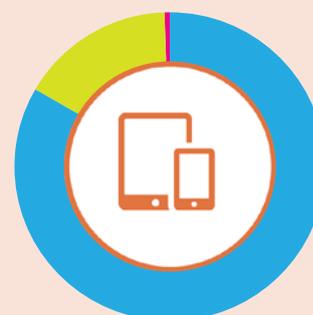
6,600

Total Visits

Visitor Type	Total
New	699
Recurring	549
One off	150

Most visited	Views
Homepage	986
Meet the team	249
Connected Berkshire	131

Device information

The below information shows the types of devices viewers are using when engaging with our website.

Browser	Views
Chrome	437
Edge	148
Safari	84
Firefox	32
Internet Explorer	12

Device	Usage
Desktop	613
Mobile	117
Tablet	4

@BerksDIG

Social media has been a key factor in helping us reach our Residential and Business audience. These statistics detail how we have built our new social media presence which will help us share key messages and gather feedback and feeling that will be key to delivering our goals.
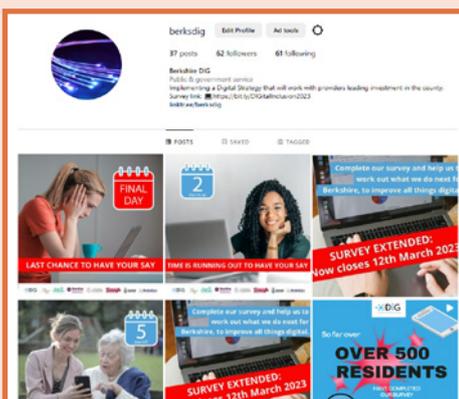
FACEBOOK

29 Followers

75 Posts

INSTAGRAM
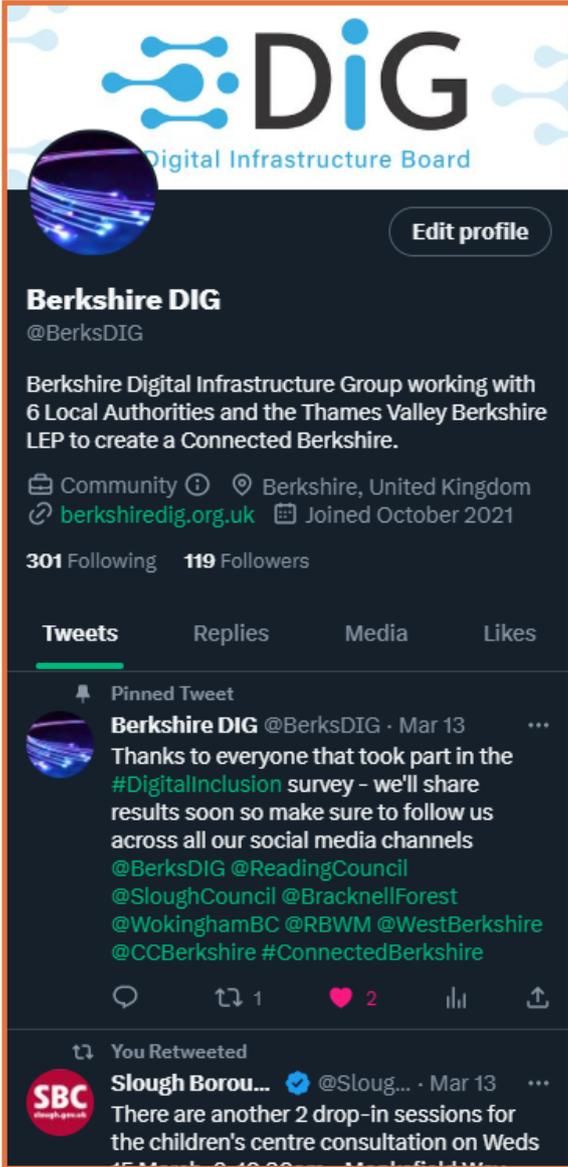

62 Followers

79 Posts

TWITTER

Twitter is the most engaged channel for Berkshire DIG and has proven to be used by both residents and businesses.

High impression rates and video views / watch times proves that animated or short (30sec) videos are the way forward.

121
Followers

87
Posts

52,226
Impressions*

*Impressions - number of times tweet was seen on twitter

The Numbers:

Retweets	112
Posts liked	249
Posts made	87

Video views	1,118
Mins viewed	835
Hours viewed	13.9

Digital Inclusion

Digital Inclusion:

Digital inclusion refers to the effort to ensure that all members of a society have access to digital technologies and the internet, regardless of their economic, social, or geographical circumstances.

Digital Inclusion

Rob Pocock
Digital Inclusion

Digital inclusion refers to the effort to ensure that all members of a society have access to digital technologies and the internet, regardless of their economic, social, or geographical circumstances. Digital inclusion aims to provide equal opportunities for individuals and communities to participate in the digital world, which has become increasingly important for education, employment, and civic engagement.

Digital inclusion involves three main components: access, skills, and affordability. First, access refers to the availability of digital infrastructure, such as broadband internet and devices like smartphones and computers. Second, skills refer to the ability of individuals to use digital technologies effectively and safely. Finally, affordability refers to the cost of digital infrastructure, such as internet subscriptions and devices, and whether it is affordable for individuals and communities.

Digital inclusion is important for several reasons. First, it promotes social equity by ensuring that all individuals have equal access to opportunities that arise from the digital economy. This includes job opportunities, access to information and services, and the ability to engage in e-commerce and online financial transactions. Second, digital inclusion is necessary for civic engagement and participation. For example, citizens can access government services online, participate in online communities, and engage in online activism. Finally, digital inclusion is essential for education and learning. Many schools and universities use digital technologies to deliver coursework and educational resources, and it is increasingly important for students to have access to digital devices and reliable internet connections to succeed in their studies. However, despite the importance of digital inclusion, there are still many individuals and communities who lack access to digital technologies and the internet. This is known as the digital divide. The digital divide can be caused by various factors, including economic inequality, geography, age, and disability. For example, individuals who live in rural areas may have limited access to broadband internet, while older individuals may lack the skills and knowledge necessary to use digital technologies effectively.

To address the digital divide and promote digital inclusion, governments, non-profit organizations, and businesses have implemented various initiatives which include expanding broadband infrastructure, providing digital skills training and education, offering low-cost or free devices and internet services, and promoting digital literacy programs.

We have conducted two Digital inclusion surveys to help DIG understand the area's and elements that need to be addressed across the region. The headlines show that Infrastructure as a whole is available and used – yet there are still some that do not embrace the technology

and services offered online.

In conclusion, digital inclusion is essential for promoting social equity, civic engagement, and education. It involves ensuring that all individuals and communities have access to digital infrastructure, skills, and affordability. Although the digital divide remains a challenge, various initiatives have been implemented to address this issue and promote digital inclusion.

Online

Below are some of the headlines statistics from the 'Online' part of our Digital Inclusion survey - there is more to do to understand our residents but it shows coverage and usage or the internet is reasonably high across Berkshire.

1,114
responses to our online survey

83%
stated that they had saved money by buying things online

94%
use the internet daily

97%
have broadband at home

40%
that use online services do not pay Council Tax online

80%
rate their internet ability at either Excellent or Good

45%
not interested in improving their computer skills

Over 65's mostly use a laptop or desktop

72%
have booked a GP appointment online

64%
have ordered prescription medicine online

60%
of respondents have never looked for a job online

...but of the **410** that have, **72%** found a job

Offline

For the 'Offline' portion of the survey, 80 face to face conversations were held in a variety of settings - libraries, and public high streets were a couple of them.

Whilst it is clear there are still people struggling to use the internet, this was more in the over 65+ category. Areas identified where we can increase public access would be libraries and community centres.
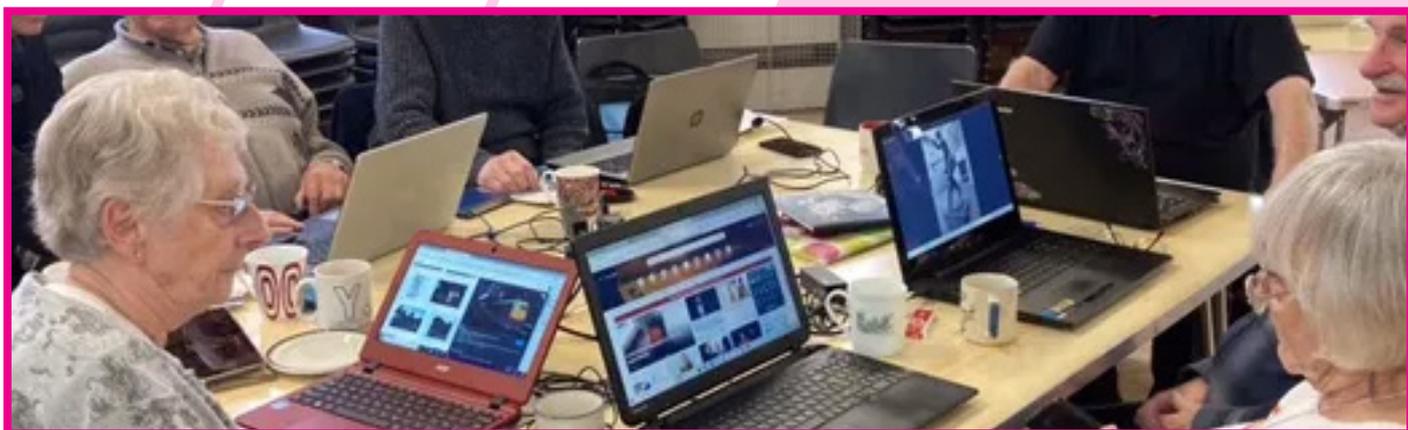
84

conversations held with members of the public

Booking GP appoinments is something people felt they now needed to do online

AGE

was cited as the biggest barrier to internet use

Lack of **skills and confidence** stops people going online

Next Steps

The next steps for the us in this space is to share the findings of the survey with both Local Authorities and Residents to give them an understanding about the things people do and can do online, as well as what prevents others from getting online.

We are also creating a Digital Inclusion Taskforce to help take these key elements, as well as the Access, Skills and Affordability elements forward within each Local Authority area.

Forward Look

Lynne Wilson - Programme Manager
Berkshire Digital Infrastructure Group

As the world continues to shift towards a more connected and digitised future, the role of digital infrastructure will become increasingly important.

The Digital Infrastructure Group, with a focus on 5G and wireless technology, is well positioned to play a critical role in shaping this future.

Over the next few years, 5G technology will become more universal and widespread, providing faster and more reliable connectivity to people and businesses around the world. The Digital Infrastructure Group can play a key role in facilitating this transition by investing in and deploying the necessary infrastructure to support this new technology across Berkshire. This may include the development of new towers, antennas, and other wireless infrastructure, as well as the integration of new technologies like edge computing and machine learning.

In addition to 5G, the Digital Infrastructure Group can also focus on the development and deployment of other wireless technologies like Wi-Fi 6 and 6E, which offer faster and more reliable connectivity within buildings and other enclosed spaces. By providing

these services, DIG can help businesses and individuals stay connected and productive, even in areas where traditional wired infrastructure is limited or unavailable.

Looking further ahead, we will also explore the potential of emerging technologies like 6G, which promise even faster speeds and lower latencies than 5G. By investing in these technologies early, the Digital Infrastructure Group can position itself as a leader in the next generation of wireless connectivity.

Overall, the Digital Infrastructure Group has a bright future ahead, as the demand for faster and more reliable connectivity continues to grow. By focusing on 5G and other wireless technologies, the group can help facilitate this growth for businesses and residents alike.

> " faster and more reliable connectivity continues to grow "

Lynne

Why not follow us on social media?

BerkshireDIG

@BerksDIG

@BerksDIG

www.berkshireDIG.org.uk