

Digital Wolverhampton Strategy

March 2022





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Introduction

The Digital Wolverhampton Strategy sets the framework (and updates the **Wolverhampton Digital Infrastructure Strategy**) as a live, action orientated partnership approach to delivering our overarching aims:

- **Wolverhampton is a Gigabit and Smart City** with futureproofed digital infrastructure including full fibre broadband and 5G utilised to transform delivery of services and develop new applications to unlock its potential.
- **100% digitally included Wolverhampton** ensuring all residents have the access to devices, connectivity and skills to take advantage of what digital has to offer
- **Growing the Digital Economy** and talent pipeline building on our futureproofed infrastructure to start and grow businesses creating jobs for local residents meeting skills needs for the future.

Futureproofed Digital infrastructure is the backbone of a modern thriving economy driving productivity and spreading growth and in delivering effective and efficient public services. Covid-19 accelerated the adoption of digital services by several years and digital is critical to power economic and social recovery.

The City of Wolverhampton adopted the Wolverhampton's Digital Infrastructure Strategy in January 2020. Its proactive approach to supporting the rollout of futureproofed digital infrastructure is proving effective with the commercial rollout of full fibre broadband and 5G across the city underway, connecting residents and businesses to Gigabit Connectivity.

To maximise the benefit locally, we need to tackle the digital divide supporting residents to get online, improve digital skills, supporting businesses to digitalise and introduce smart technology to support the delivery of services. Going forward, digital needs to be considered the 4th utility.

The Digital Wolverhampton Strategy centres around five themes which our Data Strategy will underpin:



Digital Infrastructure



Digital Inclusion



Digital Innovation



Digital Economy (Business)



Digital Economy (Learning, Skills and Jobs)

Strategic context

Council Plan, 'Our City – Our Plan'

'Driven by digital' is a cross cutting principle in our Council plan in recognition that the city is at the forefront of digital infrastructure and innovation. Wolverhampton is one of the first cities to host a commercial 5G accelerator making us truly a world leader in emerging technology. Now more than ever digital skills and connectivity are vital to ensure our residents can access services, interact with friends and family, and enter the job market. Within the Council, Our Council Programme also recognises the importance of digital to maximise how we use digital and other technologies to deliver better services and outcomes.



West Midlands Digital Roadmap was developed in recognition that digital connectivity is going to be vital to our economic bounce back post pandemic. It is the golden thread that links all of our industries – manufacturing, automotive, life sciences, professional services, construction, low carbon, transport, healthcare, public services - all are being transformed by the power of digital technologies. Ensuring all our citizens are equipped to play a full part in, and benefit from this transformation is a shared endeavour.

West Midlands Digital Roadmap missions:

- Securing access for everyone to digital opportunities, particularly those in poverty
- Sharing and using data to improve people's lives
- Becoming the UK's best-connected region
- Realising the potential of digital to transform our economy and build economic resilience
- Using digital public services to build a fairer, greener and healthier region

The Levelling Up agenda recognises the importance for Cities to be digitally connected if they are to thrive. A key mission of Levelling Up White Paper is to enhance digital connectivity with the aim for the UK Government and private sector to deliver nationwide gigabit-capable broadband and 4G coverage, with 5G coverage for the majority of the population.

By 2030, the UK will have nationwide gigabit-capable broadband and 4G coverage, with 5G coverage for the majority of the population.¹

Infrastructure is only part of the picture: economic benefits will only materialise if businesses and workers have the skills to take advantage of improved infrastructure and ensure that people have sufficient digital skills to reap the benefits and prosperity arising from the digital economy.

In 2021, DCMS highlighted the West Midlands as having the country's fastest-growing tech sector, expected to create thousands of new jobs by the end of 2025 and amongst the highest levels of 5G coverage in the UK as a result of the success of the WM5G Testbed programme. However more needs to be done to foster the next generation of tech start-ups, build on innovation opportunities and level up digital opportunities for everyone to benefit. The West Midlands Smart City Region Programme will scale-up digital opportunities across the region, drive new digital start-ups and deliver digital catch-up programmes.



¹ Source: [Levelling Up White Paper 2022](#)

Digital Wolverhampton Partnership

Digital Wolverhampton Partnership comprises of:

- City of Wolverhampton Council
- Royal Wolverhampton NHS Trust
- University of Wolverhampton
- City of Wolverhampton College
- Wolverhampton Homes
- Black Country & West Birmingham CCG

The purpose of the Digital Wolves Partnership is to develop Wolverhampton's approach to digital including infrastructure, innovation and inclusion providing strategic leadership for digital across the City. This includes:

- Supporting the rollout of futureproofed digital infrastructure
- Developing a Smart Vision utilising digital innovation in delivery of services
- Developing a digital innovation plan for the city including 5G use cases
- Making Wolverhampton a 100% digital included city
- Tackling key priorities such as youth unemployment, climate change and supporting the growth of the digital economy ensuring a talent pipeline for future growth

Digital Priorities



Infrastructure

Removing barriers to rollout of futureproofed infrastructure

Standardising processes embedding as business as usual

Implementing policies including planning and dig once

Addressing connectivity issues

National and regional lobbying to fill gaps



Inclusion

Scaling up Wolves online

Promoting Wolves Tech Aid

Providing individualised support

Delivering a Digital Champion Network

Providing devices for children and young people

Taking a place-based approach

Addressing data poverty



Innovation

Introducing smarter decision making

Providing a tech enabled service delivery to improve the quality of life & health

Addressing key challenges through tech

Becoming a leading smart city

Developing skills for digital innovation



Economy

Providing business support and enterprise

Supporting e-commerce and online trading

Developing digital leadership and workforce skills

Supporting innovation in key sectors and the supply chain

Growing the tech sector



Skills & Learning

Delivering Digital Wolves Infrastructure Academy

Delivering Digital Bootcamps

Improving workplace digital skills

Attracting and retaining talent within the city

Developing the Digital Wolves website

With digital moving at a fast pace, detailed actions plans will support our aims and delivery. Action plans will be reviewed and updated on a regular basis.



Digital infrastructure

VISION Gigabit City

BACKGROUND

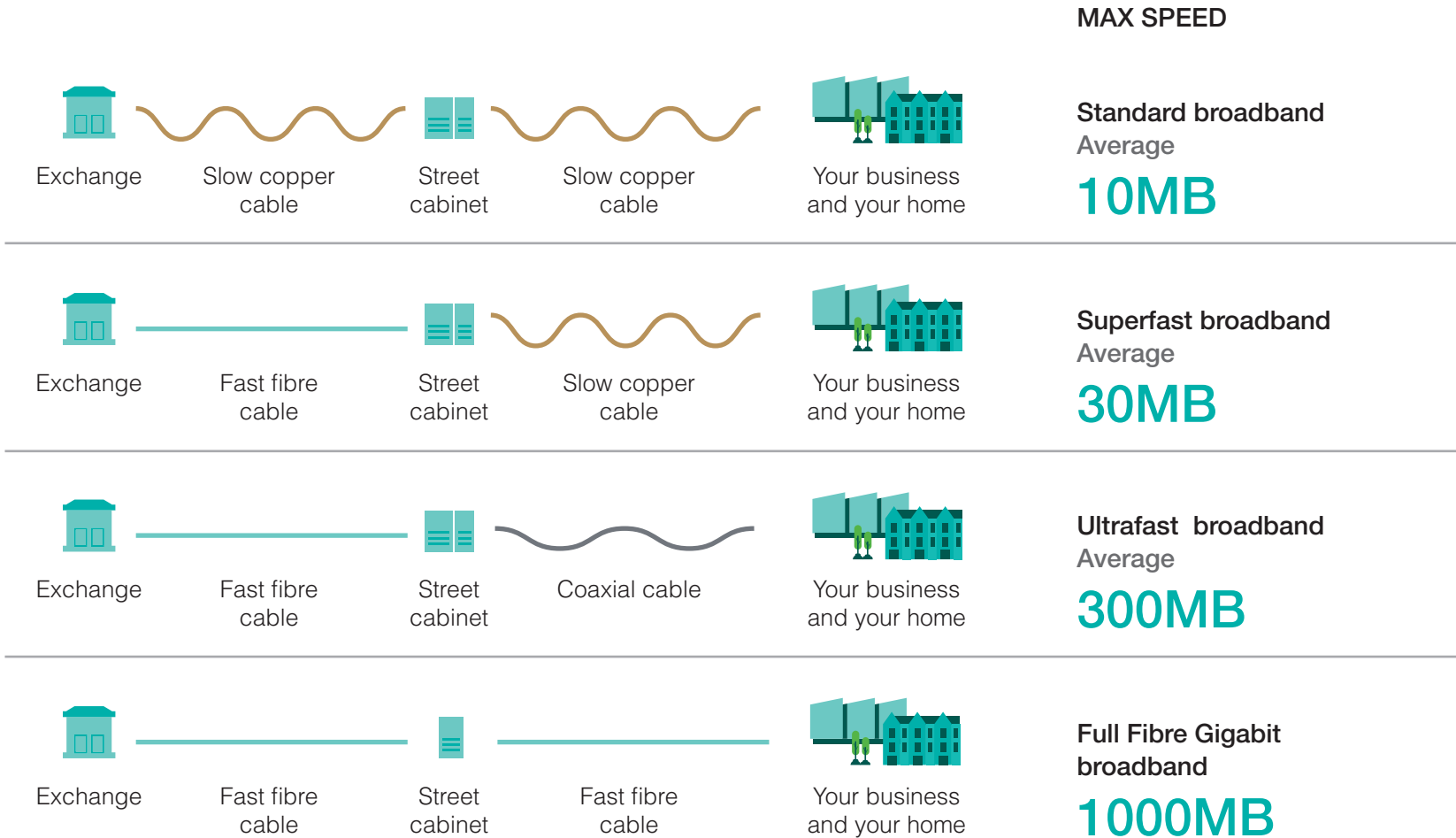
Despite good coverage of both superfast (99.4%) and ultrafast (93.32%) broadband, there were gaps in coverage especially in the city centre with only 1.87% of Wolverhampton connected to full fibre broadband, less than many rural areas.

Wolverhampton adopted its Digital Infrastructure Strategy in January 2020 in recognition that futureproofed digital infrastructure is essential in achieving the city's digital ambitions including a commitment to support and remove barriers to the rollout of full fibre and wireless infrastructure.

Embrace the new evolution in mobile technology 5G is addressing the demand for faster data speed, on the move video streaming and instant access. 5G supplements networks to deliver and uninterrupted mobile experience.



AVERAGE BROADBAND SPEEDS



Note: These are sourced from Ofcom although there are different definitions used by Ofcom and UK Government

PROGRESS

170 public sector buildings including council and Wolverhampton Homes offices, libraries and schools have been upgraded to full fibre broadband. Significant progress has been made with the commercial rollout of full fibre broadband underway and all four Mobile Network Operators rolling out 5G in the city with our proactive approach accelerating deployment of 5G by at least 6 months.

Support

To support the commercial rollout of full fibre broadband across households and businesses across the city, the council has adopted non-exclusive block wayleaves to facilitate the rollout of full fibre across housing estates in Wolverhampton, developed a planning toolkit to ensure full fibre is provided in new housing and commercial developments and specific full fibre and 5G policies in the Black Country Core Strategy. In

addition, a dig once approach has been introduced to ensure ducting/fibre is installed as part of local public realm and regeneration projects.

To support the rollout of 5G, the Council (working with WM5G) has introduced new systems to support the rollout including identifying suitable assets viable for telecoms uses, agreeing a commercial model to facilitate the rollout and improving access arrangements including standardised wayleaves and leases.

A new transparent process has been introduced for planning applications for 5G Masts including pre-application discussions with Planning re siting and appearance. We are also making available our street furniture on a non-exclusive basis to facilitate the rollout of Small Cells and upgrading our streetlights to Smart as part of the rollout of LED leading to energy and carbon savings.

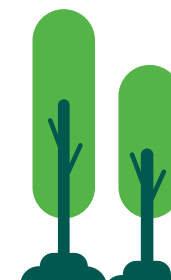
WE HAVE

170 buildings
connected to full fibre
network

Commercial rollout
underway

Barrier
busting

Block
wayleaves

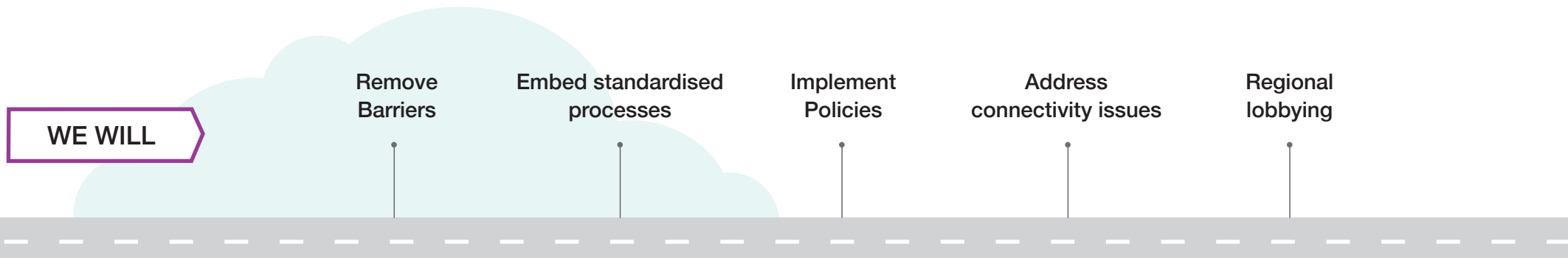


However, this proactive approach needs to be maintained to ensure that all residents and businesses can benefit from futureproofed digital infrastructure including lobbying to ensure that areas will not be “locked out” of the commercial rollout.

Many people are unaware of the benefits of 5G or misunderstand what it is, therefore in order to add misinformation about digital infrastructure, we will ensure that frequently asked questions are made available to address concerns.

WE WILL

1. Proactively develop approaches, remove barriers and address misinformation to accelerate the commercial rollout.
2. Embed new standardised **processes and agreements** to support the rollout of 5G as ‘business as usual’
3. Implement **policies** that support the rollout including planning, dig once and block wayleaves
4. Explore innovative means of **addressing connectivity issues** supporting other themes such as community public WiFi
5. Support National and regional lobbying to address gaps including broadband vouchers for ‘locked out’ areas





Digital Inclusion

VISION

100% digitally
included city

BACKGROUND

An estimated 11,659 households in Wolverhampton are without broadband¹ however there are an estimated 118,000 limited and non-users of the internet in Wolverhampton². Although age is the biggest indicator, 44% of those that are offline are under the age of 60.

Although motivation and skills are a key factor, another issue was access to devices and connectivity, often due to data poverty. Covid-19 highlighted the extent of the issue with many residents unable to access online learning, employment support and access to services including health. Schools reported lack or unsuitability of devices for pupils to access remote learning and challenges around connectivity. There is a strong correlation with more deprived areas and particular groups.

11,659¹

Wolverhampton
households without
broadband

118,000²

limited and
non-users of
the internet

44%

of people offline
are under
60 years old

¹ Point Topic, 2020

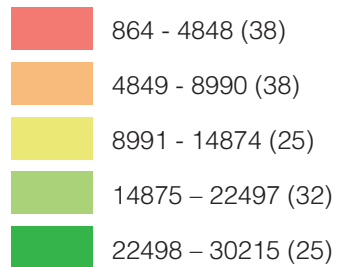
² 'Good Things Foundation (2020) [Good Things Foundation - Improving lives through digital](#)

RELATIVE RISK OF NON-ADOPTION, ENGLAND RANKING (Point Topic, 2020)

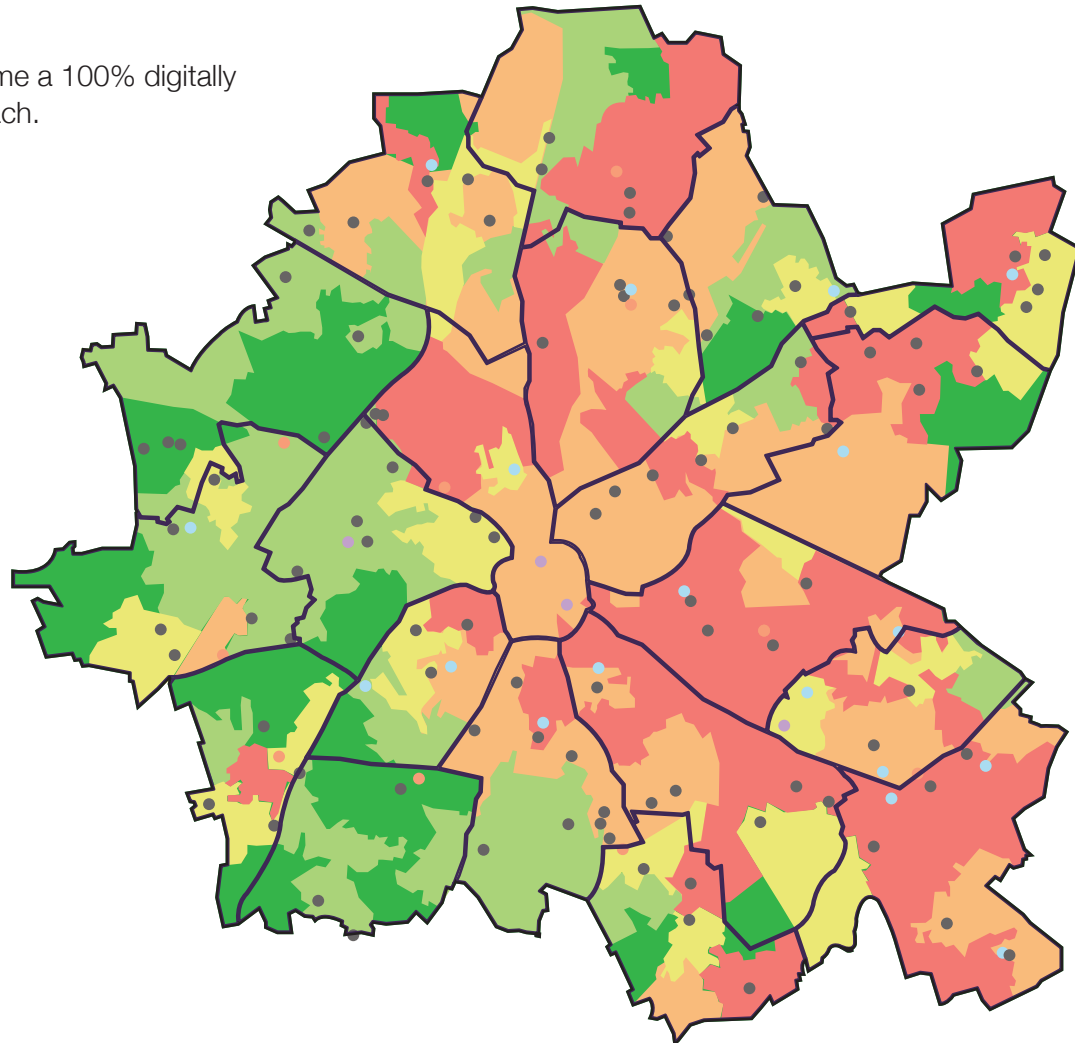
Map shows concentration of digital exclusion across the city of Wolverhampton

Our ambition is for Wolverhampton to become a 100% digitally included city linked to a place based approach.

Point Topic Nat. Rank



Type



TRUSTED PARTNERS



PROGRESS

Devices and Connectivity

The city developed **Wolves Online**, a device and connectivity lending scheme targeting residents to access online learning, employment support, access services and to reduce isolation through a number of trusted partners, complementing devices distributed by Online Centres through the Good Things Foundation **DevicesDotNow**.

Schools, Adult Education, the College and other providers lent out devices to their learners so they could continue to access learning during lockdown. The city also lent out **devices and connectivity to schools** so that pupils could

access remote learning topping up the national DfE scheme funded through ward funds and donated BT hotspot vouchers. A local tech company, supported by key partners established **Wolves Tech Aid** a device recycling scheme aimed at providing devices to children. Public WiFi has been mapped providing a hybrid approach to connectivity.

WE HAVE

Wolves Online

DeviceDotNow

Devices for Schools

Wolves Tech Aid

Support

Online Centres and Community Voluntary Organisations across the city, part of the Wolves Online trusted partner network, have provided **support to get people online and improve digital skills** of residents and progress to essential digital skills provision. As the Wolves Online scheme, a consortium of experienced trusted partners was commissioned to **build capacity** of other trusted partners to support residents get online including production of a resource pack.

The NHS has worked jointly with colleges to develop digital skills training centred around the NHS App. Support for Universal Credit claimants includes Help to Claim and Clickstart.

Challenges

Due to the sheer scale of the challenge to ensure **100% of Wolverhampton's residents are digitally included**, our approach must be **scaled up** to meet the needs of our residents with the motivation for engagement and nature of devices reflecting individual needs and the process being as easy as possible with devices being set up and individualised intensive support being available to support residents get online.

Connectivity remains a huge issue - despite good broadband coverage, many residents are unable to afford connectivity to get online so we need to explore options for residents getting online including fixed and mobile **connectivity options** ensuring sufficient connectivity to meet the needs of residents.

Support people
to get online

Improve
Digital Skills

Trusted Partner
Network



WE WILL

1. **Scale up Wolves Online** device and connectivity lending scheme to reach more residents taking into account individualised needs in relation to type of devices and connectivity options, through increasing the number of devices and expanding the network of Trusted Partners capturing diverse groups and communities.
2. Continue to support and promote **Wolves Tech Aid** to recycle end of life devices and distribute to children, young people and residents to enable them to get online.
3. **Develop longer term affordable options** relating to access to devices.
4. Ensure **individualised support** residents, in all age groups, to get online, address confidence, motivation and improve their digital skills including progression to essential digital skills and address barriers such as technical and safety concerns.
5. Scale up support for residents through developing a **Digital Champion** scheme recruiting volunteers to support residents in the community

WE WILL

Scale up
Wolves Online

Promote
Wolves Tech Aid

Provide
individualised support

6. **Work with schools** to ensure every child and young person in the city has the tech and connectivity they need to succeed with their learning.
7. Establish **place-based hybrid support** both at home and within Trusted Partners/Digital Hubs including increased access to public Wi-Fi.
8. **Address data poverty** through exploring more affordable fixed and mobile connectivity options.

Develop Digital Champion
Network

Work with
schools

Place based
approach

Address
data poverty





Digital Innovation

VISION

Better services,
better quality of life,
driven by digital

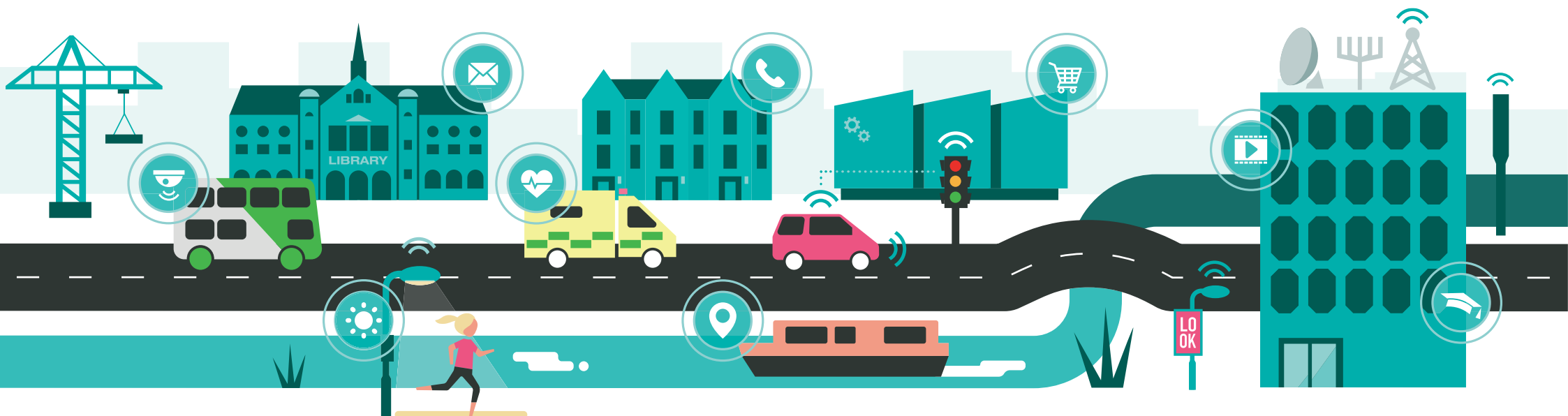
BACKGROUND

The development of futureproofed digital infrastructure opens up significant opportunities to transform delivery of services and development of new applications to unlock its potential.

A smart city is an urban area that uses different types of Internet of things (IoT) sensors to collect data and then use these data to manage assets and resources efficiently.



STAGES TO BECOME A SMART CITY



1

City wide fibre platform providing open access bandwidth to unlock smart city benefits

2

City wide connection to all public sector buildings, commercial and residential buildings with full fibre connectivity benefits

3

Smart city site additions including 5G connectivity on street furniture allowing faster data speeds and instant access

4

Enablement of 5G and IoT connecting sensors and devices to facilitate transmission of data for enhanced decision making and automation

5

Smart application deployment, connectivity, engagement and inclusion to unlock smart city benefits

PROGRESS

City of Wolverhampton partners are proactively integrating digital innovation in the delivery of services and priorities:

City of Wolverhampton Council will be adopting it's internal digital strategy to proactively integrate digital to drive and deliver efficiency via innovative technology,

- Put the customer and city first
- Increase partnership collaboration
- Provide responsible technical architecture to deliver programmes and positive outcomes; and provision for governance, security, data, network and business continuity.
- Implement master data management
- Explore 3D planning
- Introduce reminiscence interactive therapy and activities (RITA) in care homes.

The NHS are exploring the potential of digital innovation around data, prevention and delivery of services. Initiatives include developing an integrated care system and 5G use

cases including a 5G Care Home Project connecting a GP in Bilston to a local care home offering video consultation, diagnostic tools and capturing vital sign information to allow for early identification of issues and endoscopy pilot.

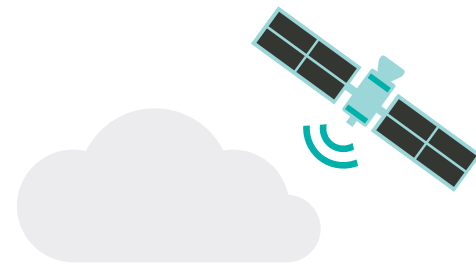
The University of Wolverhampton has ambitious plans to transform Wolverhampton Science Park into a Centre for Digital Innovation for Smart Cities (DISC) including

- 10 innovation labs,
- 5G Innovation Hub
- Wolverhampton Cyber Security Institute
- Being shortlisted to host a 6G summit.

The Science Park is also home to one of the three 5prinG Application Accelerators that help organisations harness the power of 5G to deliver growth and innovation offering cutting-edge facilities and expertise can help public and private companies to understand 5G, its applications and support to unlock its potential. 5prinG is focusing on key Smart City challenges: health & social, public service delivery & reinvigorating the high street.

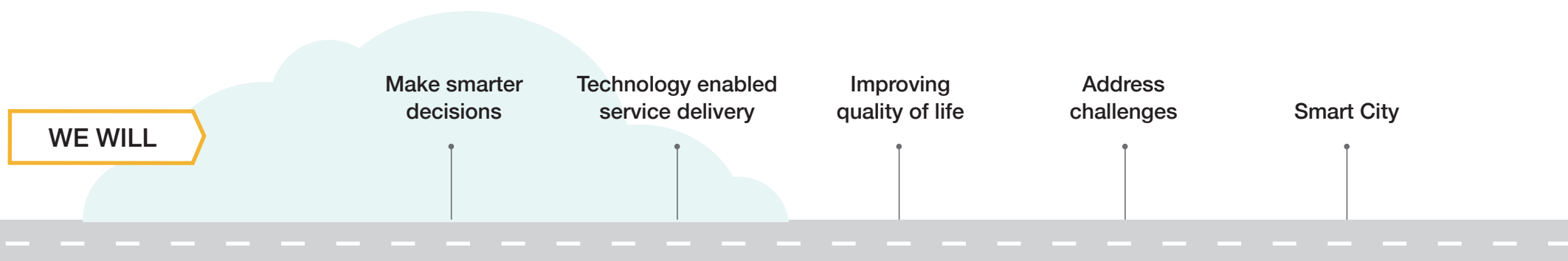
Wolverhampton Homes is working towards piloting a Connected Tower Block replacing the current intercom system with a solution that integrates smarter door entry with smart building technologies and Internet of Things (IoT) sensors, working jointly with the NHS for Smart Health and Council on technology enabled independent living with devices provided to each home to address digital inclusion.

The **City of Wolverhampton College** is working on proposals for a new state-of-the-art purpose built college building in the city centre, incorporating digital within its infrastructure.



WE WILL

- Utilise data to make smarter decisions enabling better targeting and delivery of services
- Develop digital roadmaps for city priorities setting out how we will use technology to innovate services including:
 - Technology enabled service delivery making better and more efficient services e.g. highways management including fly tipping detection, road condition monitoring and smart parking.
 - Technology enabled independent living and health to improve quality of life, prevent and manage health conditions
- Addressing key challenges and priorities through technology e.g. climate change.
- Become a leading Smart City for the future by maximising benefit from West Midlands Smart City Programme.
- Ensure digital skills of workforce to embrace and implement digital innovation solutions.





Digital Economy (Business)

VISION Digital City (Business)

BACKGROUND

Covid-19 accelerated the adoption of digital by several years - including remote working, remote learning, telehealth and ecommerce - with digital considered critical to level-up our economy and power economic and social recovery. Economic intelligence has shown that during the pandemic 76% of Small-Medium Businesses relied on digital and 52% used digital to sell more and stay connected¹. Covid-19 has shown us that businesses that have been able to channel shift to online trading and secure online customers are more successful and resilient. The digital shift to online trading is here to stay. However, many smaller businesses and entrepreneurs do not have the skills, capabilities and/or access to technologies to do this efficiently.

Technology is becoming more important for the UK economy. Nationally, the rate of tech GVA contribution to the UK economy has grown on average by 7% per year since 2016 generating nearly three million jobs. The City's futureproofed digital infrastructure provides a good foundation for Local Digital Capital, the building blocks for strong place-based digital technology ecosystems. The West Midlands currently perform well on infrastructure, R&D and trade compared to other regions, but performs less well on skills, adoption and finance & investment, therefore these are key areas the City must address in order to benefit from the growth of the Tech sector. The 2021 Tech Nation Report identified Wolverhampton and Walsall as having seen an increase in Digital Start-ups by 422%. Digital also offers huge opportunities to grow key sectors such as creative tech and green tech as identified in Wolverhampton Pound.²

¹ Lloyds Bank Consumer Digital Index 2021

² Tech Nation Report 2021

PROGRESS

Prior to Covid-19, the city partnered with eBay to support 60 businesses to get online through the **eBay Retail Revival** programme. Businesses involved in the programme reached £7m in sales with an average growth rate of 33% with sole traders enjoying a growth rate of nearly 100%. A survey of buildings found 58% had hired or plan to hire more staff, 51% had expanded their businesses premises or plan to and 53% exported their product overseas.

During the pandemic, the Relight the City Business Support programme provided access to a free package of **support**, business and digital reviews and access to Relight grants of

up to £5,000 to implement the recommendations in the reviews. The Digital Review aimed to assist the company in **strengthening their online presence** including the use of their website to market the company, the use of **social media** and their technical capability.

The importance of digital connectivity is recognised in offices with I9 applying for wired score status, an industry recognised rating of the quality of a buildings digital connectivity. The Council, Black Country Chamber of Commerce and University of Wolverhampton are working together to develop an Enterprise Hub

WE HAVE

eBay Retail
Revival

Provided
support

Strengthened
online presence

Strengthened
capability

Developed online
presence

WE WILL

1. Influence national, regional and local **digital business support** activity to ensure our vital local businesses get the right digital support for them.
2. Support businesses and entrepreneurs to integrate **e-commerce** into day-to-day business activity and channel shift to online trading and Data & Cyber Security.
3. Develop the **digital skills** of workforces including the signing the FutureDotNow pledge motivating people and businesses to boost their digital skills to thrive in a digital UK.
4. Support **digital innovation in key sectors and their supply chain** including aerospace, advanced manufacturing etc.
5. Grow the **tech sector** through ensuring key ingredients in place to support the growth including workspace, support, access to finance and the environment, retaining talent.
6. Drive new digital start-ups through practical business support.

WE WILL

Digital business
support

e-Commerce

Digital Skills

Digital Innovation
for supply chain

Grow the
tech sector



Digital Economy (Learning, Skills and Jobs)

VISION

Develop, attract
and retain digital
skills

BACKGROUND

Digital skills are crucial for employment with Covid-19 forced digitisation in the workplace. However nationally only 52% of workforce have the necessary digital skills for work, 22% do not have life skills and 16% lack foundation skills allowing them to participate in a digital world.¹ **Lloyds Digital Index 2021** confirmed in the last 12 months that although things have improved with less people offline and more with essential digital skills, 11 million people are still lacking basic digital skills and 36% still lack essential digital skills for the workplace.

There are some key opportunities for residents in digital. Tech Nation reports the number of advertised tech jobs in 2021 is 42% higher than pre-pandemic levels,² Tech vacancies make up a higher proportion of all vacancies in the UK post-pandemic and the average tech salary is up to 50% higher than the average and is increasing whilst the average salary for all jobs in the UK has decreased in 2021. In addition, there are also significant job opportunities being generated through the rollout of futureproofed digital infrastructure. However, in both these areas, local businesses continue to report difficulty recruiting due to skills gaps.



¹ Lloyds Digital Index Report 2021

² Tech Nation Report 2021

PROGRESS

The City of Wolverhampton College and University of Wolverhampton amongst other skills partners have strong digital offers.

The City of Wolverhampton College was winner of Creative Training provider in 2019 and the University of Wolverhampton offer a range of digital courses including specialisms in cyber security, software games development, emerging interactive and smart technologies including their new multi million pound Screen School developing skills in screen based media including Animation and Games Design.

The Council developed the [Digital Wolves website](#) bringing together digital skills provision in one place. In addition,

Wolves Digital Infrastructure Academy is being developed in partnership with the City of Wolverhampton College, University of Wolverhampton and Council to support Wolverhampton residents to get jobs in this growing sector.

West Midlands Combined Authority have funded a number of **Digital Bootcamps** linked to real jobs in the tech sector. The Council are developing a **Digital Skills Framework** developing foundation skills (basic digital skills everyone should have, regardless of role), essential digital skills (skills required by anyone using IT and digital on a daily basis) and specialist skills (advanced skills required by people in specific role).



WE WILL

1. Enhance Digital Wolves website and develop communication campaign to raise awareness of digital skills, learning and jobs opportunities.
2. Raise awareness and engage with children and young people to raise aspirations and engage in digital by creating future digital workforce.
3. **Improve digital skills** in the workforce to meet in needs of the employers.
4. **Tackle youth unemployment** by supporting Wolverhampton young people into tech sectors through Digital Bootcamps.
5. **Develop skills and support access to digital jobs** through the Digital Wolves Infrastructure Academy (DWIA).
6. **Create the right environment** to attract and retain talent.

WE WILL

Raise
aspirations

Improve
digital skills

Tackle youth
employment

Support to gain
digital jobs

Attract and retain
tech talent

Measuring outcomes and outputs

We will continue to develop the performance management framework for the Wolverhampton Digital Strategy, however the key initial Key Performance Indicators include:



Digital Infrastructure

% full fibre coverage
Increase 5G data demand



Digital Inclusion

No. of non-internet users
No. of people receiving devices through Digital Wolves Partnership initiatives
No. of trusted partners supporting Wolves Online initiative



Digital Innovation

No of people with improved quality of life, prevent and manage health conditions using Internet of Things (IoT) sensors



Digital Economy (Business)

No of businesses receiving digital support
No of Creative Tech businesses across the city



Digital Economy (Learning, Skills & Jobs)

No of residents gaining digital skills through Digital Wolves Partnership initiatives
No of residents accessing Digital Bootcamps/Digital Wolverhampton Infrastructure Academy

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or in another language by calling 01902 551155

wolverhampton.gov.uk 01902 551155

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