



**CAMBRIDGESHIRE
& PETERBOROUGH**
COMBINED AUTHORITY

Agenda Item No: 2.1

Connecting Cambridgeshire Update

To:	Housing and Communities Committee
Meeting Date:	21 June 2021
Public report:	Yes
Lead Member:	Cllr Lewis Herbert – Lead Member for Housing & Communities
From:	Noelle Godfrey, Programme Director Connecting Cambridgeshire
Key decision:	No
Forward Plan ref:	N/A
Recommendations:	<p>The Housing and Communities Committee is recommended to:</p> <ul style="list-style-type: none">a) Note the progress of the Connecting Cambridgeshire Digital Infrastructure Programme during 2020-2021 and the plans to November 2021b) Note and endorse the proposal to bring forward a refreshed Digital Infrastructure Strategy for 2021-2025 for approval to the Committee in November 2021
Voting arrangements:	A simple majority of all Members present and voting

1. Purpose

- 1.1 The purpose of this report is to give an update to the Housing and Communities Committee on the progress of the Connecting Cambridgeshire Digital Connectivity Infrastructure Programme over the last year, provide an overview of the plans for the next six months and to set out the rationale for presenting a refreshed digital infrastructure strategy for Committee approval in autumn of 2021.

2. Background

- 2.1 The Connecting Cambridgeshire Digital Connectivity Infrastructure programme was originally initially set up in late 2011 to address the lack of Superfast Broadband(24mbps+) coverage across Cambridgeshire and Peterborough. However the remit of the programme has since broadened to incorporate all aspects of digital connectivity infrastructure, including mobile coverage(4G and 5G), future facing full fibre broadband, free public access Wi-Fi “hot spots” and exploiting digital infrastructure connectivity with “Smart” technology.
- 2.2 Initially led by Cambridgeshire County Council, with funding from Government, Peterborough City Council and the EU, the programme continues to be hosted by the County Council but with funding, governance and oversight of several of the workstreams from the Greater Cambridge Partnership (for the Smart Cities programme) and the Combined Authority (mobile, public access Wi-Fi, full fibre and extension of the Smart programme to Cambridgeshire Market towns).
- 2.3 In 2018, the Combined Authority adopted a Digital Connectivity Strategy for 2018-2022, which set out the ambition for a world class digital infrastructure to support businesses, communities and public service delivery across Cambridgeshire and Peterborough.
- 2.4 This included provision of an annual digital connectivity review update, charting development against targets and updated plans. The progress report for the financial year 2020-2021 is included at Appendix A of this report and includes an overview of the immediate next steps.
- 2.5 The Covid-19 pandemic has both highlighted and accelerated dependence on digital connectivity in all areas of 21st century living. Over the last two years there have also been significant changes in government policy with regard to digital connectivity and considerable changes in the telecommunications commercial landscape. Taken together these factors indicate that it would be advantageous to revise and update the Digital Connectivity Strategy in 2021, in order to reflect the current circumstances. More details about the rationale for the proposal to bring a revised strategy to the Housing and Communities Committee in November are set out in Appendix A of this report.

Significant Implications

3. Financial Implications

- 3.1 A budget overview is included in Appendix A, there are no further significant financial implications.

4. Legal Implications

- 4.1 The recommendations accord with CPCA's powers under Part 4 of the Cambridgeshire and Peterborough Combined Authority Order 2017 (SI 2017/251) and with the Committee's Terms of Reference as set out in CPCA's Constitution Chapter 10 para.3.2.9(b).

5. Other Significant Implications

- 5.1 There are no other significant implications.

6. Appendices

- 6.1 Appendix A Digital Connectivity Strategy progress review 2020-2021

7. Background Papers

N/A

Appendix A Digital Connectivity Strategy progress review 2020-21

Introduction

The Covid-19 pandemic has both highlighted and accelerated the importance of digital connectivity for all aspects of 21st century living. The Connecting Cambridgeshire programme is working with Government and industry to improve digital connectivity across Cambridgeshire and Peterborough to drive economic growth, help our communities to thrive and make it easier to access public services. It is also delivering 'Smart' work streams to exploit digital connectivity for Greater Cambridge, Cambridgeshire Market Towns and Peterborough.

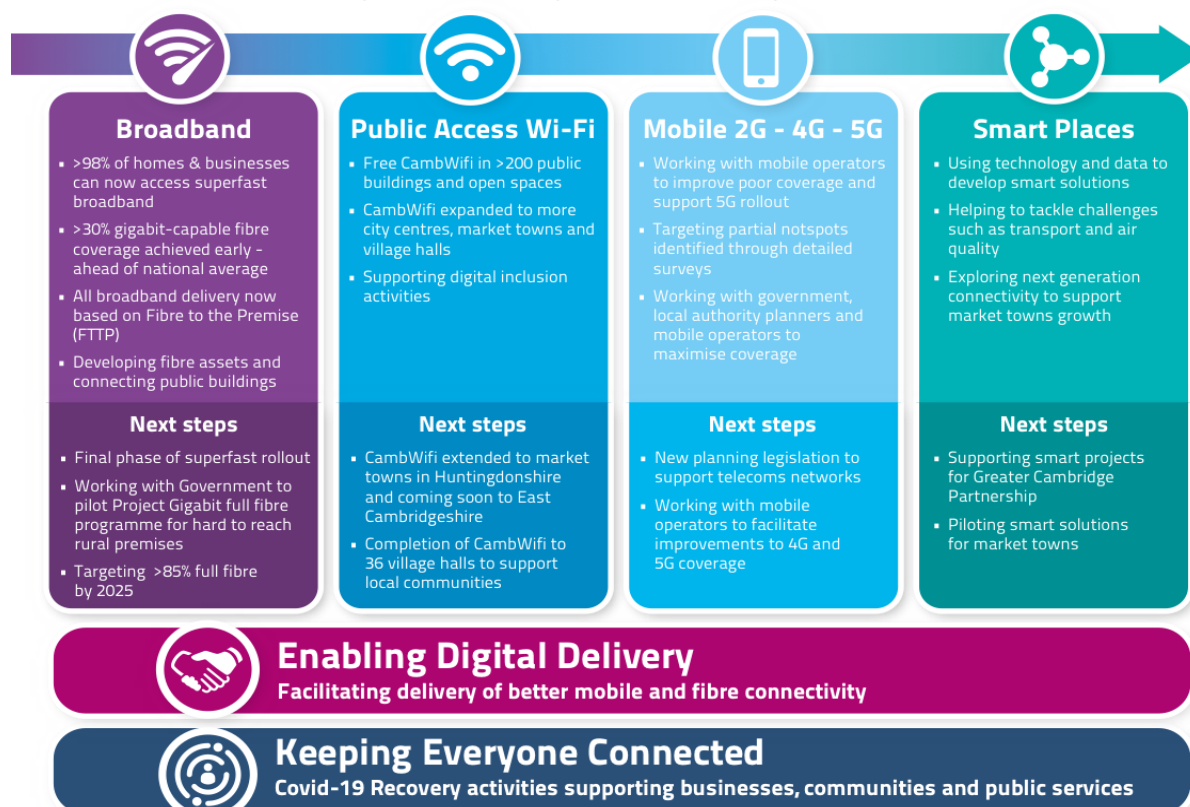
In March 2018, the Cambridgeshire and Peterborough Combined Authority (CPCA) Board approved funding to support the expansion of the existing Connecting Cambridgeshire Programme to deliver better digital connectivity across Cambridgeshire and Peterborough. This included setting up a dedicated Enabling Digital Delivery (EDD) team to facilitate the delivery of mobile and full fibre networks.

In response to the Covid-19 pandemic, a 'Keeping Everyone Connected' work stream was established in 2020 to focus in the short term on digital connectivity and signpost support available for residents and businesses. This work has included matched funding from the Combined Authority and EU for a highly successful £1million Digital Technology Business Grants scheme to promote recovery for eligible SMEs.

This report provides an overview of the work underway across Cambridgeshire and Peterborough to improve broadband, mobile and public access Wi-Fi coverage, whilst securing future proof full fibre and 5G networks to take advantage of emerging technology.

The Connecting Cambridgeshire programme currently includes four work streams across all aspects of digital connectivity infrastructure and communications technology with cross-cutting work streams for Enabling Digital Delivery and Keeping Everyone Connected. A summary of the different workstreams is set out in the following infographic, with further details set out below:

Connecting Cambridgeshire Programme Update



Broadband and Full Fibre

Most homes and businesses across Cambridgeshire and Peterborough can access superfast broadband (24+Mbps), with many also able to access services based on fibre to the premise (FTTP) technology, offering faster, more reliable speeds of up to 300Mbps and above with the ability to upgrade to Gigabit speeds as required.

- The Connecting Cambridgeshire Superfast Broadband rollout has reached over 125,000 premises that would not have got it otherwise, with nearly 4,000 more mainly rural premises due to be covered in the final phases of the rollout by 2022.
- Combined with commercial coverage, Superfast Broadband coverage exceeds 98% of premises and full fibre coverage is over 30%. Both the Superfast and the Full Fibre coverage figures are above the national average and ahead of Government targets, with the Full Fibre target met over a year early. However, the Superfast coverage target was impacted by supply chain and delivery disruption caused by the Covid-19 pandemic and is slightly behind the target to cover over 99% premises in Cambridgeshire and Peterborough. It is anticipated this will now be achieved by the end of 2021.

Full fibre networks support the fastest, most reliable internet access - capable of gigabit speeds of 1000 Mbps, which are future-proof and provide the backbone for 4G and future 5G mobile services.

- Full fibre coverage is increasing at pace through a mix of direct intervention and stimulating the market to provide commercial coverage. Commercial full fibre deployments from a range of telecommunications operators are underway or planned in Cambridge, Peterborough, Ely, St Neots, Yaxley, Glinton, Helpston, Whittlesey, Soham, Wisbech and a number of South Cambridgeshire villages.

In early 2021 Government announced a revised national Full Fibre target of achieving 85% coverage by the end of 2025, a change from the 2020 target of 100% coverage by 2030. This is a significant change for a predominantly rural county, because it is based on an average across the country, which means there would be a risk that Cambridgeshire and Peterborough could miss out on early deployment of Full Fibre in rural/hard to reach areas.

However following intensive engagement with Government, Cambridgeshire and Peterborough has been confirmed as one of the initial pilot areas for the new £5bn Project Gigabit national programme bringing gigabit-capable connections to remaining rural areas. This involves rolling out full fibre infrastructure for up to 140,000 harder to reach premises in the county and along its borders, starting in 2022.

- Subject to a successful procurement process, it is anticipated that this project will enable Cambridgeshire and Peterborough to set a challenging target to exceed the Government's national target of 85% gigabit capable coverage by 2025. This will be an ambitious challenge for a predominantly rural county, which will support the recovery from Covid-19, assist the development of the local economy and underpin the climate change and sustainability objectives of our area.
- Government requires local support for the delivery of the project and the Connecting Cambridgeshire team has already started the requisite pre-procurement market consultation and review processes in collaboration with the Department for Digital, Culture, Media & Sport (DCMS). It is anticipated that there will be a clearer view of timescales and the details of the

Project Gigabit deployment by September/October 2021, which will feed into a strategy refresh in November 2021.

- Several community fibre broadband projects using the Government's Gigabit Voucher funding scheme are proceeding. £1,089,278 has been issued in vouchers for Cambridgeshire and Peterborough to date. The Combined Authority has provided £500,000 in top up funding for eligible premises.

Since 2017, with the addition of Combined Authority funding, Connecting Cambridgeshire has been successful in attracting several competitive funding streams, which are contributing to improving the digital infrastructure for businesses, communities and public services by increasing the fibre footprint:

- Public Sector Buildings Upgrade (PSBU) project - funded through the Local Full Fibre Networks (LLFN) Government grant awarded to Cambridgeshire in April 2018 to develop fibre assets. Grant funding of over £250,000 has enabled 117 sites to be upgraded with full fibre to support gigabit-capable services in County and District Council buildings, schools and libraries. This increased connectivity has also supported provision of public access Wi-Fi across Cambridgeshire market towns.
- Public Sector Assets Reuse (PSAR) project – also funded through the Local Full Fibre Networks (LLFN) Government grant, this has provided £600,000 funding to support the deployment of fibre ducting in Cambridgeshire transport infrastructure schemes.

During 2018/19 the Combined Authority, the Greater Cambridge Partnership and Cambridgeshire County Council all adopted new policies to support delivery of fibre trunking in all infrastructure schemes, which both minimises delivery costs and the disruption of retrofitting fibre infrastructure.

As part of this initiative a joint venture, Light Blue Fibre, was set up between the University of Cambridge and Cambridgeshire County Council to develop and make both organisations' existing extensive duct and fibre networks available on a commercial wholesale basis.

- In February 2021, the company announced a strategic partnership with infrastructure provider euNetworks and the Kao Data centre to develop the fibre network to facilitate high performance computing services, allowing business and research campuses to connect to key sites in the UK, and across Europe.
- As part of the "dig once" policy fibre ducting has been installed during the Histon Road and Robin Hood Road Junction works in Cambridge, and in the Kings Dyke scheme at Whittlesey.
- Plans are in place to incorporate fibre ducting where viable* in all the proposed "greenway" schemes radiating from Cambridge. (* where the dig plans meet fibre ducting standards requirements).
- Discussions are ongoing with the Department for Transport and Highways England to include fibre ducting in the A428 upgrade

Mobile and 5G

As part of the programme, the Enabling Digital Delivery team is working with planning authorities, mobile operators, leading businesses, and government to improve mobile coverage and capacity.

- Local surveys have been undertaken and the latest Ofcom data analysed to identify partial “notspots” where better mobile coverage will bring a range of economic and community benefits, including business/research parks, roads and rail lines.
- Connecting Cambridgeshire is working with local MPs and business leaders to highlight the survey findings, advocate for the area with Government and emphasise the negative impact of patchy mobile coverage on the wider economy.

5G is the next generation of mobile communications and is required to underpin future connectivity including Internet of Things (IoT) technology. Planning authorities have seen a marked increase in planning applications to upgrade masts for 4G and 5G from mobile operators and new legislation has revised guidance on permitted infrastructure. The provision of mobile masts continues to divide public opinion and mast upgrade planning submissions are problematic for both planning teams and the infrastructure providers supporting mobile operators.

- Plans are being developed to improve the current process by recruiting a telecommunications planning specialist to support the City and District planning teams and work with mobile network operators to facilitate better quality planning submissions and better outcomes.
- A study into the opportunities to accelerate 5G deployment in market towns and rural areas is currently underway and due to be completed by the end of June.

Public Access Wi-fi

Public access Wi-Fi, known as “CambWifi” is available at over 200 public buildings, village halls and community sites across Cambridgeshire and Peterborough. During 2020/21 this provision has been expanded to market town and city centres, working in partnership with the District and City Councils to support digital inclusion and Covid recovery initiatives.

- As a result of this expansion, CambWifi is now available across Huntingdonshire market towns and the Oxmoor Estate. It is also being extended across East Cambridgeshire market towns and to Peterborough city centre.
- CambWifi has been deployed to 36 rural village halls across the County, using funding from the Department for Health.

Smart Places - advanced communications and emerging technology

Advanced data techniques, sensor technology and digital connectivity are creating opportunities for better productivity and innovative solutions, which can positively impact on business growth, community well-being and the delivery of public services across the region.

The Connecting Cambridgeshire Programme has developed and delivered the “Smart Cambridge” programme in partnership with the University of Cambridge for the Greater Cambridge area as part of the Greater Cambridge Partnership Programme over the last five years. A new workstream, sponsored by the Combined Authority was established in 2020/21 to extend elements of the Smart programme to Cambridgeshire market towns.

The ACET (Advanced Communications and Emerging Technologies) workstream is deploying trials of ‘smart’ technologies and data solutions to demonstrate how they can be used to support the ambitions of Market Towns Masterplans. Following a successful pilot in St Neots, the additional workstream was approved in June 2020 and will run for an initial 18-month period.

- Pocket SmartPanels are currently being launched to help people make sustainable transport choices - providing real time bus and train information via smartphones, and SmartPanels displaying location-specific travel information on large screens will be deployed in a variety of buildings across market towns over the next two months (July and August 2021).
- Work is also underway to deploy an “Internet of Things” (IoT) LoRa low power long range network that will support the deployment of sensors to collect information on air quality, flooding etc.

Keeping Everyone Connected

The Coronavirus pandemic has highlighted the importance of digital connectivity and society’s increasing reliance upon it in a rapidly evolving technology landscape. The ‘Keeping Everyone Connected’ work stream is focussed on digital connectivity supporting businesses and communities through recovery and inclusion.

- Connecting Cambridgeshire’s £1million Digital Technology Grant Scheme to boost business growth, funded by the Combined Authority with support from the European Regional Development Fund has supported 140 Small and Medium sized businesses to date with grants up to £10,000.
- Connecting Cambridgeshire’s Enabling Digital Delivery team is also working with social housing associations and telecoms networks to facilitate deployment of full fibre broadband and encourage internet and mobile service providers to offer affordable tariffs, so that residents and tenants can access the internet.

