



Agenda Item No: 2.1

Digital Connectivity Strategy progress update

To:	Housing and Communities Committee
Meeting Date:	14 November 2022
Public report:	Yes
Lead Member:	Councillor Lewis Herbert Lead Member for Housing and Economic Growth
From:	Noelle Godfrey, Connecting Cambridgeshire Programme Director
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 to date towards the delivery of the agreed Digital Connectivity Strategyb) Recommend to the Combined Authority Board to approve the minor adjustment to the budget profile
Voting arrangements:	A simple majority of all Members present and voting

1. Purpose

- 1.1 This report gives a summary of progress to date in the delivery of the Cambridgeshire and Peterborough Digital Connectivity Strategy for 2021-2025 which was approved by the Housing and Communities Committee in November 2021 and sets out a revised annual budget profile.

2. Background

- 2.1 The Digital Connectivity Strategy set challenging targets to help ensure that the Cambridgeshire and Peterborough Combined Authority area is well positioned to take full advantage of current and emerging technology advances.
- 2.2 The Covid-19 pandemic dramatically accelerated reliance on digital connectivity in almost every aspect of 21st Century living. At a time when access to healthcare, jobs, education and training have all become highly dependent on digital connectivity, it has also highlighted the “digital divide”. It means that families and individuals without access to connectivity are effectively excluded from the benefits of economic growth, health inequalities are exacerbated, and children’s life chances are damaged. These issues are being amplified by the current cost of living crisis, further exacerbating digital inequality and impacting on those most deprived and vulnerable in our communities.
- 2.3 The delivery of the Digital Connectivity Strategy 2021- 2025 is a key contributor to the Combined Authority’s sustainable growth ambitions for Cambridgeshire and Peterborough, helping to ensure that a ubiquitous and accessible digital connectivity infrastructure is available to all – supporting effective public service delivery, thriving communities and sustainable business growth.
- 2.4 This progress update reports on the Connecting Cambridgeshire programme delivery of next-generation broadband connectivity and mobile coverage, using ‘Smart’ technologies to improve the environment, and extending free public access Wifi, while supporting digital inclusion.
- 2.5 **Broadband coverage.**

Superfast and Full Fibre Broadband coverage in Cambridgeshire & Peterborough is above the national average and ahead of Government targets:

- 98.6% of premises can access partial/full fibre “superfast” broadband which means the programme is on track to reach the 99% target.
- 75% of premises can access gigabit capable broadband coverage with download speeds of at least 1000Mbps. Coverage is increasing at pace through direct intervention and commercial deployment towards exceeding the Government target of 85% by 2025.

Connecting Cambridgeshire’s proactive approach to ‘barrier busting’ continues to be instrumental in speeding up digital delivery for fixed and mobile infrastructure, whilst also generating measurable carbon savings.

An increasing number of fibre broadband providers are actively planning and delivering gigabit capable fibre networks in Cambridgeshire & Peterborough within a highly competitive commercial market. However, the challenges involved in rolling out broadband infrastructure means the operators need a supportive local environment to deliver successfully. As part of the programme, a dedicated Highways Inspector resource has been provided in the Street Works team to ensure that the increased pace of fibre roll-out can be effectively supported.

2.6 **Fibre ducting in infrastructure schemes.**

The 'dig once' policy has resulted in fibre ducting being installed in several new transport schemes and made available on a commercial basis. This allows telecoms operators to avoid costly and disruptive retrofitting encouraging them to extend gigabit capable broadband networks connecting businesses and communities that would not otherwise have access. Recent examples include:

- Fibre ducting installed as part of the Kings Dyke level crossing at Whittlesey is being used to bring gigabit connectivity to homes and businesses that were inaccessible because of the rail lines.
- Integrating fibre ducting in a major re-working of the Robin Hood Road junction in Cambridge allowing gigabit broadband to be rolled out to more homes and businesses on the outskirts of the city.

Using the Highways England calculator, it is estimated the "dig once" policy has already resulted in savings of over 20 tonnes of CO2e emissions in relation to materials use alone over the last two years. This is equivalent to the carbon emission of nearly half a million miles driven by an average car.

2.7 **Mobile coverage.**

Connecting Cambridgeshire is working with local authorities and mobile network operators (MNOs) looking to invest in 4G and 5G networks to improve coverage and capacity, which will have a long-term economic impact for the area. This includes commissioning local surveys to understand areas of poor mobile connectivity and comprehensive data analysis of planning applications

Recent activities include:

- An online Mobile Coverage Briefing session for Members in June 2022, focused on Cambridge and South Cambridgeshire, explaining the benefits and challenges of expanding 4G and 5G networks to support business and communities.
- This has been summarised in a Mobile Coverage Factsheet to support decision making at a local level and area specific briefing sessions are being arranged for other Districts.
- Dedicated digital connectivity planning officers have been appointed to proactively engage with MNOs and Cambridgeshire and Peterborough planning teams to balance the requirements for new infrastructure with local planning sensitivities.

- Additional detailed mobile phone coverage testing is currently being commissioned to update previous survey work and highlight coverage issues.
- Trials are underway to investigate the opportunities for the innovative use of street furniture such as lighting columns and multi-use utility poles to host a range of devices including small cells, environmental sensor networks and potentially electric vehicle charging. Small cells are being deployed initially in Cambridge, but work is underway with operators to understand the wider opportunities.

2.8 Smart sensors

Emerging “Internet of Things” (IoT) technology can help in the collection and analysis of a range of data which can support the areas Net Zero and climate change mitigation strategies, including the collation of environmental, flooding and traffic indicators.

In order to support this work an expanded IoT network has now been deployed in St Neots, Ely and Soham with other areas to follow including Cambourne, St Ives, Ramsey and Huntingdon. This network supports the easy deployment of sensors and is currently being used to install flood sensors in St Neots and St Ives with further trial deployments planned.

The sensors will give the County Council’s floods team and local communities early warning of flooding events. Air quality sensors have been deployed in St Neots is also planned in March.

2.9 Access & Inclusion

The Digital Connectivity Strategy included targets to ensure that gigabit capable broadband provision for social housing matches that for market housing by 2025. Work to facilitate positive relationships between fibre providers and Housing Associations and to negotiate wayleave agreements has been productive to date, with analysis indicating social housing provision is starting to improve and is currently just below 70%. Liaison with housing providers and telecommunications providers suggests that the grant scheme for housing associations that was originally envisaged as part of the strategy will not be required in order to continue progressing towards the 2025 target.

However the current unprecedented cost of living crisis is creating new challenges and further exacerbating the digital divide, with many more people struggling to access broadband and mobile connectivity.

- New research from Ofcom (July 2022) shows 29% of UK households had difficulty affording a communication service, with 84% of benefits recipients being unaware that they already qualify for cheaper broadband deals.
- A recent report on the economic impact of digital inclusion commissioned from Cebr by the Good Things Foundation (July 2022) shows that the digital divide is holding back productivity, and the economy as a result and that every £1 invested in addressing the digital divide yields a £9.48 return to the local economy.

Changes in the way the current telephony infrastructure operates are also likely to create fresh challenges for digital inclusion.

In what is known as “Copper Switch Off”, the Public Switched Telephone Network (PSTN) will start to be phased out from 2026 onwards and replaced with digital systems delivered over broadband connections. This will affect public services, businesses and domestic premises making people even more reliant on digital connectivity.

At the time the 2021-2025 Digital Connectivity strategy was developed it was envisaged that the UK Government would act as a central point of signposting and communication in relation to the copper switch off, or that it would mandate telecommunications providers to do so.

However this has not been the case and there is concern that many people and small businesses are not aware of the change so it will require a greater level of local signposting and awareness raising, especially among those who do not use mobile phones or cannot access the internet.

With many more people struggling financially it is anticipated that the planned national switch-off of copper phonelines could now have an even greater effect on the most vulnerable in our communities as well as small businesses unprepared for the change.

To date the Access and Inclusion workstream for the Programme has primarily focussed on public access Wifi provision and improving digital connectivity infrastructure for social housing residents. However there is increasing evidence that a lack of convening and coordination resource for Cambridgeshire and Peterborough is hampering the efforts of the many voluntary, community and social organisations working to support digital inclusion across the area as well as enabling better targeting of initiatives from larger business as part of their ESG (Environmental, Social & Governance) commitments.

In order to meet the increasing digital inclusion challenges it is proposed to expand the signposting and coordination activities in relation to both digital inclusion generally and copper switch off specifically within the access and inclusion workstream.

This will include a greater emphasis on preparation for copper switch off to help small businesses as well as the most vulnerable in our communities. It is anticipated this can be achieved within the current budget allocation by reprofiling some of the other digital inclusion activities such as the grant scheme for Housing Associations whilst ensuring delivery to the agreed outcomes.

2.10 Budget re-profile

Good progress has been made on the Digital Connectivity Strategy workstreams to date. Whilst the strategy delivery themes and overall budget remain the same, there are emerging and external factors affecting the timing of some future delivery meaning an adjustment to the spend profile across the years as follows:

	2022-3	2023-4	2024-5	Total
Original Budget	2,118,000	1,500,000	1,500,000	5,118,000
Revised Budget	1,262,000	1,943,000	1,913,000	5,118,000

Further details in relation to the revised budget profile are as follows:

- The Rural Gigabit Voucher scheme top-up spend has been delayed due to the government's project gigabit procurement timeline being extended. This means that the voucher scheme has been suspended by government for longer than expected, pushing the majority of spend from 2022 to 2023. However the Gigabit Voucher scheme remains an important source of funding for those premises too remote or complex to connect by commercial rollout or Project Gigabit.
- Incorporation of fibre ducting in the Milton Road scheme in Cambridge will be completed later than originally planned following delays to the scheme start, so some costs will be incurred after this financial year.
- Minor re-profiling of spend due to the delay in recruitment of the specialist telecoms planning resource which is now in place for Cambridge and South Cambridgeshire and Peterborough.
- Small cell trial deployment has been delayed due to complexities of the Cambridgeshire County Council streetlighting PFI contract and processes which has meant that contract changes have taken longer than originally planned, pushing spend into the next financial year.
- IoT network spend has been re-profiled due to initial difficulties in finding locations to deploy the gateways which provide power and connectivity. Work is on-going to explore the use of Anglian Water infrastructure.
- Work with Housing Associations and fibre providers, to remove barriers and encourage joint working has already enabled improvements in gigabit broadband connectivity and we will build upon this to ensure that the Social Housing Gigabit capable target is met. However, there is a critical need for more work to address the issues emerging from the planned copper switch off and the deepening digital divide, both affecting the most vulnerable and deprived in our communities.

Significant Implications

3. Financial Implications

- 3.1 There are no additional financial implications. As outlined above, the total budget to deliver the Digital Connectivity Strategy and the strategy delivery themes remain the same so there are no significant financial implications. The revised spend profile across the 3 years is set out in section 2.9 above.

4. Legal Implications

- 4.1 There are no additional legal implications

5. Public Health implications

- 5.1 There are no additional public health implications.

6. Environmental and Climate Change Implications

- 6.1 The implications for supporting progress towards net zero and climate change mitigations in relation to reductions in carbon and environmental monitoring are set out in paragraphs 2.6 and 2.8 above.

7. Other Significant Implications

- 7.1 There are no other significant implications.

8. Background Papers

Documents referenced:

Connecting Cambridgeshire [Mobile Coverage Factsheets June 2022](#)

[Cambridgeshire and Peterborough Digital Connectivity Infrastructure Strategy 2021-2025](#)

Ofcom [Affordability of communications services](#) July 2022

Good Things Foundation [Report on the economic impact of digital inclusion](#) July 2022.