



Digital Connectivity Strategy 2025-29 – Concept Paper

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Executive Director Sign-off	Judith Barker, 25/07/2024

Key Project Information

Project/Programme Name	Delivery of Digital Connectivity Strategy 2025 – 2029 (Year One)		
Submitting Organisation	Connecting Cambridgeshire, Cambridgeshire County Council		
CPCA Directorate	Place & Connectivity		
CPCA Service	Digital Connectivity		
Primary Strategic Objective	Improving Digital Connectivity - To enhance the Local Transport and Connectivity Plan (LTCP) by improving digital connectivity throughout the region.		
Accountable Owner	Judith Barker, Executive Director Place & Connectivity		
Delivery Responsibility	Cambridgeshire County Council, Connecting Cambridgeshire		
Location of Project	Cambridgeshire and Peterborough (CPCA region)		
Funding Type	CPCA Funded	Included in the MTFP?	No

Brief Description Project/Programme purpose: (single line only)

We are seeking funding to implement the first year (2025 – 2026) of the refreshed Cambridgeshire and Peterborough Digital Connectivity Strategy 2025-2029. This strategy aims to deliver a future-facing, long-lasting digital infrastructure, ensuring that residents and businesses have the necessary access to digital connectivity. Subject to the approval of the concept we are developing a business case for the 4 years which can be considered both for the first year of funding for 25/26 but also for the feed into the MTFP process to 2029 for all 4 years. The first year funding enables continuity in this key business area of digital connectivity which is key to LTCP delivery and also noted in the Government focus on enabling growth through Local Growth Plans with MCAs

Detailed Description of the Project/Programme purpose: (be as full and descriptive as you can)

What are you trying to achieve e.g. The problem that requires solving, the opportunity that can be capitalised on, a regulatory mandated change etc

Digital connectivity is vital for meeting some of the key challenges of our age - from sustainable growth to climate change mitigation and the management of scarce resources including water and energy and improving people's life opportunities through the provision of access to retail, leisure, education, and health facilities. This pivotal role is reflected in the **Combined Authority's Local Transport and Connectivity Plan (LTCP)** and the Digital Connectivity Strategy 2025-2029 is integral to the LTCP, enhancing and extending the groundwork laid by the Connecting Cambridgeshire program, which the Combined Authority has led since 2017.

2024/25 is the final year of the current funding from the Combined Authority for the Connecting Cambridgeshire Programme therefore a new digital connectivity strategy for the next 4 years is being developed. We are seeking approval for Year 1 of this longer-term project. Following agreement through the SAF, this initial phase will be integrated into the Medium-Term Financial Plan (MTFP) over time, securing agreement for Year 1 is crucial to provide continuity and certainty for our staff. This approach will allow us to establish a solid foundation while we continue to evaluate the project's integration through the SAF to ensure alignment with the MTFP.

The implementation of this four-year strategy will ensure that the Combined Authority achieves its goal of exceptional and essential digital connectivity, and ensures our region not only meets but exceeds the ambitious targets set by central government for digital accessibility across the UK. This supports efficient public service delivery, thriving communities and sustainable business growth.

Pursuing all available funding avenues to expand fibre coverage is central to the vision for building connected communities in the region. Although there has been significant investment in digital infrastructure, Cambridgeshire and Peterborough still lack ubiquitous full fibre connectivity. Therefore, Connecting Cambridgeshire is focused on securing funding to extend fibre coverage to areas, especially remote and isolated rural regions, where telecommunication infrastructure providers currently have no plans to develop. Utilising CPCA funding, Connecting Cambridgeshire will continue to support commercial fibre providers, explore other external funding sources, and undertake local interventions where needed to fill these gaps in provision.

The Connecting Cambridgeshire programme collaborates with multiple partners to support the region's broader goals, including greater use of sustainable transport, reducing health inequality, progressing towards net zero and mitigating climate change. By promoting digitalisation and enhanced connectivity, the programme aims to facilitate the transition to a greener, lower-carbon future and expedite carbon reduction efforts. As a key deliverable, the programme plans to support the accelerated roll-out of 5G technology. This initiative is expected to significantly contribute to achieving net-zero greenhouse gas emissions and fostering a more sustainable economy. The roll-out of 5G will enhance communication infrastructure, support the deployment of smart technologies, and improve the efficiency of energy consumption and resource management across various sectors.

Place-based infrastructure is critical to delivering growth and productivity now and, in the future, and directly benefits local businesses and residents by providing access to new jobs and improved services. Connecting Cambridgeshire will be looking into identifying new business models and applications suitable for commercial development of 5G, boosting the skills and employment opportunities for residents and encouraging the creation of new tourism business opportunities across the region.

The strategy focuses on delivering comprehensive digital connectivity across three key themes, and we are seeking funding to support these initiatives:

Digital Infrastructure – aims to provide comprehensive digital connectivity to all communities in Cambridgeshire and Peterborough, meeting the connectivity needs of both residents and businesses. This initiative prioritises future-proof technologies such as full fibre, 4G, and 5G, alongside other advanced wireless communication solutions. Even as we advance with new technologies, 4G remains a crucial part of the network infrastructure. It provides a stable and reliable foundation that ensures consistent coverage and service. 5G uses existing 4G network to ensure it can connect in more places, especially when 5G signals are not strong enough. It is expected that the equipment (like towers and antennas) used for 4G will be upgraded for 5G. And instead of building completely new infrastructure, 5G can use what's already there. While 5G is the newer, faster technology, it leans on 4G to ensure we stay connected seamlessly during this transition period.

Innovation – fostering and showcasing innovative solutions that deliver diverse benefits for residents, visitors, and businesses. It aims to attract both commercial and government investment to stimulate innovation and promote data-driven decision-making across the region. A key component involves testing and trialing innovative solutions to ensure their effectiveness and scalability. This workstream is committed to closely collaborating with industry partners to test cutting-edge technologies and enable pilot opportunities. By doing so, we aim to refine and validate these innovations before they are scaled up or fully rolled out.

Inclusion – empowering our residents and businesses to develop the skills and confidence they require to make the most of the digital connectivity available to them while raising awareness of the advantages of online access, promoting affordable connectivity, and ensuring access to necessary devices.

Funding is crucial to successfully delivering these three themes and achieving the strategy's goals.

Timelines

<i>Proposed Start Date</i>	<i>Expected Duration of Project</i>	<i>Details of factors driving start and duration (why proposed start and end date have been chosen)</i>
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April 2025	1 year (of the four year strategy)	<ul style="list-style-type: none"> • The 2021 - 2025 strategy end on 31 March 2025 • Delivering the digital connectivity strategy by 2029 ensures that the relevant objectives can be achieved and evaluated within the LTCP's implementation cycle. This strategy is going to TIC on 18 September and has been discussed by Business Board. • The proposed start and end dates are driven by the development and approval of a comprehensive business case. This business case will provide the necessary evidence and rationale to determine the optimal timeline, ensuring that the project is launched at the most appropriate time to build on the work delivered by Connecting Cambridgeshire to date and to align with the strategic aims of the Combined Authority. The business case will assess various factors, including market readiness, technological advancements, funding availability, and potential impacts, to justify the proposed schedule and duration. • The delivery of year 1 will be from April 2025-March 2026
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Impact of not proceeding

A digital connectivity strategy is not just about digital infrastructure or technology adoption but also about leveraging digital capabilities to drive growth, efficiency, innovation, and competitiveness in today's interconnected world. Its absence can severely limit the combined authority's ability to adapt to changing public expectations.

Also, this digital connectivity strategy serves as a crucial complement to the local transport and connectivity plan, addressing the integral role of digital infrastructure and technology in modern transportation systems. Furthermore, if funding for the programme were to end in March 2025, the region would face several significant impacts:

- Currently, full fibre coverage in the area stands at 86%. Without continued funding, this coverage could remain stagnant and fail to progress towards our goal of 100% connectivity. This stagnation would impede efforts to enhance digital infrastructure, limit the expansion of high-speed internet access to underserved areas, and slow down the region's digital transformation.
- Limited access to public services as the absence of fast and ubiquitous digital connectivity can create barriers for residents in terms of convenience, efficiency and inclusivity to critical information and services
- The inability to advance ongoing innovation projects and trial new technologies would hinder the region's competitiveness, economic growth, and ability to attract investment in this growing sector. If the funding is not secured, the combined authority will not have the opportunity to collect and analyse data which becomes available as a result of the implementation of the digital connectivity strategy. This lack of data-driven insight will hinder the ability to make better informed business decisions, as the valuable information provided by the strategy will be unattainable.
- The digital divide based on age, income, or location may widen, exacerbating inequalities in access to information and opportunities.
- Overall, the lack of funding would delay critical improvements, reduce the quality of services available to residents and businesses, and obstruct our progress towards a more connected and sustainable future.
- Additionally, the Cambridgeshire and Peterborough Combined Authority (CPCA) would be unable to achieve its Local Transport and Connectivity Plan (LTCP) ambitions and commitments, thereby hindering regional growth and progress

In summary, failing to implement the measures outlined in the digital connectivity strategy due to the lack of funding, could lead to missed opportunities in addressing the evolving needs of communities, stalling technological advancement, and limiting access to essential digital services.

At this stage, we are requesting funding for the first year of implementation, offering the opportunity to progress the new strategy and realise the benefits of continued delivery. Funding for the following years (2027 – 2029) will then be requested as part of the MTFP process.

Financials (Estimates)					
Current Estimate for Total Cost of project/ programme		Funding structure and CPCA Contribution		Estimated cost for creation of business case	
<p><i>What is the total estimated cost for this project including any design work</i></p> <p>Up to £2.25 million for the first year contingent upon the business case outcomes.</p> <p>A further £4.75m will be requested via the MTFP process for years 2 - 4</p>		<p><i>What is the funding structure for the total project budget and how much in the CPCA contribution to this - what is the impact of CPCA not contributing?</i></p> <p>This digital connectivity programme, although hosted by Cambridgeshire County Council, will be fully funded by the CPCA. Should we not receive this funding, we will be unable to implement the digital connectivity strategy. Nevertheless, the Connecting Cambridgeshire programme has consistently secured substantial government and external funding to supplement CPCA contributions. Although there is currently no external funding secured beyond 2025, we expect numerous future opportunities to apply for funding once the future strategy receives approval.</p>		<p><i>What is the total estimated cost for design work and creation of business case</i></p> <p>The development cost of the Business Case has already been financed through efficiency savings within the current budget allocated for the Digital Connectivity Strategy 2021-2025.</p>	
Cap ex?	Yes	Rev Ex	No	Combination of Rev & Cap Ex?	No
Assumptions or risks that could increase or decrease the total cost					
<p>Developing a comprehensive business case will result in more precise project cost estimates which may affect the amount requested. This could lead to an increase or decrease to the total funding needed although any changes are expected to be minimal. It is essential to consider factors such as regulatory changes, economic conditions, and technological advancements that may impact the project's financial requirements.</p>					
Benefits (Benefits must be measurable)					
Type	Description			Assumptions or risks that could increase or decrease the total benefits	
Financial benefits	<p>Describe the key measurable financial benefits linked to this project/programme</p> <p>Digital connectivity significantly enhances financial opportunities and efficiencies at all levels and also drives economic growth by increasing productivity and efficiency across various sectors. Remote working opportunities expand the job market beyond geographical limitations.</p> <p>Measurable financial benefits</p> <ul style="list-style-type: none"> - Number of new startups and small businesses 			<p><i>Describe any Assumptions made when estimating benefits and any risks that could increase or decrease the estimate in the future</i></p> <p>Underestimation of the capital expenditure for physical infrastructure development.</p> <p>Slower-than-expected adoption of the new technology due to lack of awareness, user resistance, or competition from other providers.</p> <p>Technological advancements will continue to support and enhance digital connectivity.</p>	

	<p>enabled by digital connectivity would lead to increase in Gross Value Added (GVA). The Tech Nation report shows that the UK tech sector significantly contributes to the economy, with startups driving 7.9% growth. This growth is largely due to the increasing number of startups and small businesses enabled by digital connectivity, which enhances Gross Value Added (GVA). For further details, you can access the report directly through Tech Nation's official website or Gov UK.</p> <ul style="list-style-type: none"> - Decrease in daily commuting distances due to remote work and digital services can have significant benefits. According to the RAC, an employee could save up to £1,000 a year by increasing the number of days working from home. Additionally, a study from the University of Birmingham indicates that remote workers can be up to 13% more productive - This will be subject to comparison with baselines and survey work to measure impact. 	<p>Regulatory policies will become more supportive of digital connectivity initiatives.</p>
<p>Non-financial benefits</p>	<p><i>Describe the key measurable non-financial benefits linked to this project/programme</i></p> <p>This new digital connectivity strategy will offer a wide range of non-financial benefits for the region such as improving public service delivery, community engagement, digital inclusion etc. These advantages contribute to building a more connected, inclusive, and resilient community, enhancing overall well-being for all residents.</p> <p><u>Measurable non-financial benefits</u></p>	<p><i>Describe any Assumptions made when estimating benefits and any risks that could increase or decrease the estimate in the future</i></p> <p>Digital connectivity will enhance digital inclusion by providing access to underserved communities. However, barriers such as affordability, digital literacy, and local infrastructure limitations may impact the adoption and inclusion.</p> <p>Increased energy consumption from data centres could offset environmental benefits.</p> <p>Physical and technical infrastructure limitations in certain areas can impact on the effectiveness of digital connectivity initiatives.</p>

	<ul style="list-style-type: none"> • Improved access to services • Increase in the number of households with access to digital devices • Percentage of the population with basic to advanced digital literacy skills • Efforts to improve digital connectivity ensure that underserved and remote areas have access to high-speed internet, reducing social and economic disparities. • This will be subject to comparison with baselines and survey work to measure impact. 	Restrictive policies and regulations can slow down the implementation and adoption of digital connectivity solutions.
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Risk, Assumptions, Issues and Dependencies (RAID)

Known Risks	<p><i>Describe any known risks to delivering this project/programme's scope, timeframes etc</i></p> <p>Dependence on third-party vendors or suppliers for technology, equipment, or services could lead to delays if there are supply chain disruptions</p> <p>Expansion of project scope beyond initial plans due to political changes, evolving requirements, or unforeseen opportunities could strain resources and timelines.</p> <p>Financial Constraints - There is a risk that insufficient funding or budgetary limitations could restrict the scope or require phased implementations, which may delay the delivery of all planned components and extend the initial timelines.</p> <p>External events such as economic downturns, political changes, natural disasters, or global pandemics can disrupt project schedules, funding availability, and operational continuity.</p>
Known Assumptions	<p><i>Describe any assumptions that have been made to date related to the delivery of this project/programme's scope, timeframes etc</i></p> <p>It is assumed that the technologies and solutions selected in the strategy are technically feasible and can be implemented without encountering significant technical challenges or obstacles. The business case will provide confidence by demonstrating that these innovations are ready for trial, however it must be appreciated that proving the feasibility of these solutions is the nature and purpose of such innovation projects.</p> <p>Residents, and businesses may resist adopting new digital technologies or processes.</p>
Known Issues	<p><i>Describe any known issues to delivering this project/programme's scope, timeframes etc</i></p> <p>Technology evolves rapidly so ongoing updates would be necessary.</p> <p>Political Uncertainty and New Government Priorities - Changes in political leadership or shifting government priorities following the last general</p>

	election could disrupt project schedules, alter funding availability, and impact operational continuity.					
Known External Dependencies	<p><i>Describe any known external dependencies to delivering this project/programme's scope, timeframes etc</i></p> <p>Regulations and policies: Compliance with national and local regulations</p> <p>Availability and quality of physical infrastructure i.e. mobile masts, fibre ducts etc</p> <p>Third-party vendors or suppliers for technology, equipment, or services</p> <p>Availability of funding and investment from public and private organisations</p> <p>Overall economic condition, which can affect the demand and spending on digital infrastructure and innovation trials.</p>					
Known internal Dependencies (tick which shared service is required)	<i>Comms</i>	<i>Procurement</i>	<i>Legal</i>	<i>Finance</i>	<i>HR</i>	<i>Policy Insight</i>
			X	X		