

Cumbria Digital Infrastructure Strategy

2026 - 2030



Welcome by the Digital Champions

Councillor Chris Southward, Digital Champion, Cumberland Council

"Cumbria is a £12bn economy, which brings together two of the UK's newest, largest, most sparsely populated and rural Unitary Authorities. Cumbria plays a pivotal role in meeting national priorities — from clean energy and defence to food production, water security, and nature recovery. Digital connectivity is a key enabler to support the Cumbria Councils' aims to create inclusive, excellent, services and economic growth that will address inequalities, protect our environment and work for local people."



Councillor Peter Thornton, Digital Champion, Westmorland and Furness Council

"Digital infrastructure, fast broadband and mobile connectivity, is critical in supporting the Cumbria Economic Strategy 2025. Connecting Cumbria works in a responsible, collaborative and inclusive way to deliver the changes that our communities have been asking for. Improving digital connectivity, ensuring everyone benefits, is an essential part of our vision for the future of Cumbria."



Background

Cumbria is a modern, entrepreneurial, rural economy where world-leading sector strengths and an outstanding natural environment drive shared prosperity for all people and places. We are in an exciting time of technological change, no one can truly foresee the impact of Artificial Intelligence (AI) and other innovations will have on how we live, learn and work over the next 5-10 years, but we are committed to ensuring that Cumbria has the digital infrastructure capacity to participate, lead and maximise opportunities. At the centre of the vision for growth in Cumbria are five core priorities:

- Creativity, competition to attract investment, compelling in our case making, and conservation of our natural resources
- Support the UK's natural capital – protecting land, and sea for biodiversity
- Deliver higher productivity to raise living standards
- Better population health, supporting people back to work
- Increased working age population to meet the needs of our growing economy
- Be the UK's first carbon neutral county



This Cumbria wide vision was developed in line with the values of both Cumberland and Westmorland and Furness Councils:

Cumberland Council

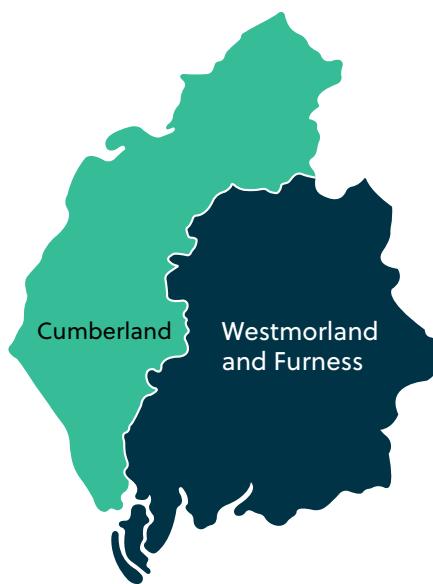


- Improving health and wellbeing
- Addressing inequalities
- Local economies that work for local people
- Environmental resilience and the climate emergency
- Delivering excellent public services
- Provide accessible and trusted services that listen, involve and engage
- Are driving change, learning and improving
- We demonstrate leadership whilst working collaboratively
- Think local first and sustainably; focus on prevention and early intervention

Westmorland and Furness Council



- Responsible - we are responsible, socially, environmentally, and financially.
- Outcome focused - we are outcome focused and we will focus on identifying and leading the delivery of the changes that our communities want to see.
- Collaborative - we will work with partners, communities, and residents to deliver the best outcomes for all.
- Ambitious - we are ambitious for everyone.
- Inclusive - we will be an inclusive council.
- Needs-led - we will intervene early to prevent harm, act in an equitable way leaving no-one behind and enable all to ask for help.
- Ecologically aware - we will provide leadership in the drive to become carbon net zero and sustainable.

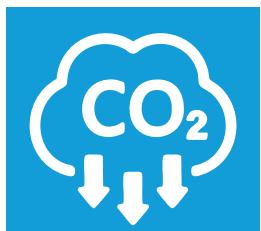


Cumberland Council and Westmorland and Furness Council Footprint

Reliable, robust, resilient and universal digital connectivity, at least as good if not better than the UK average, is essential to enable the delivery of these priorities for Cumbria. Availability of digital services also contributes to the individual Corporate Plans and Economic Plans for Cumberland Council and Westmorland and Furness Council. Delivery of connectivity cannot happen without the underpinning digital infrastructure.



Encourage investment and creativity to support economic growth and inclusion



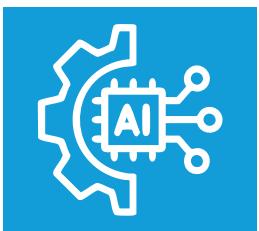
Adoption of new technologies and ways of working to reduce carbon emissions, support bio-diversity and maximise Cumbria's natural capital



Support flexible ways of working, studying and delivering services to increase productivity and support people back to work



Encourage young people to stay in Cumbria as well as inward migration of working age people



Internet of Things, Smart Places and AI



Fixed Location Broadband



Mobile Data and Communications

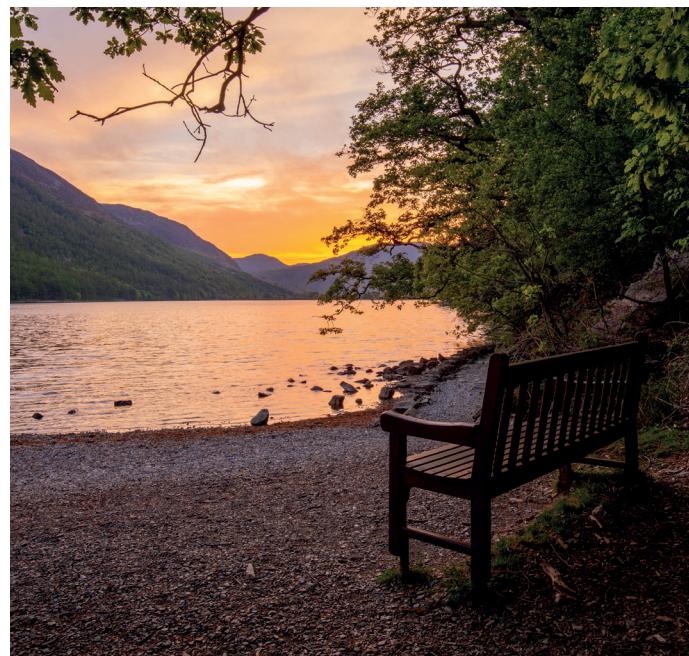
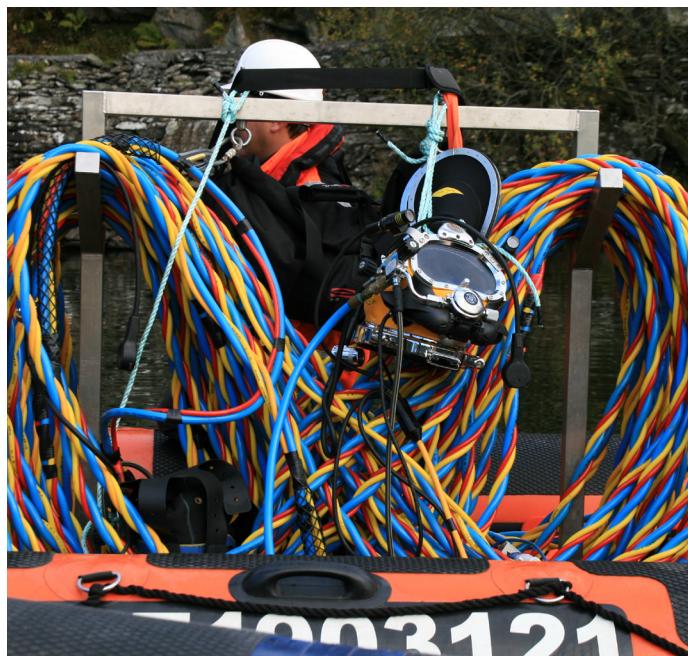
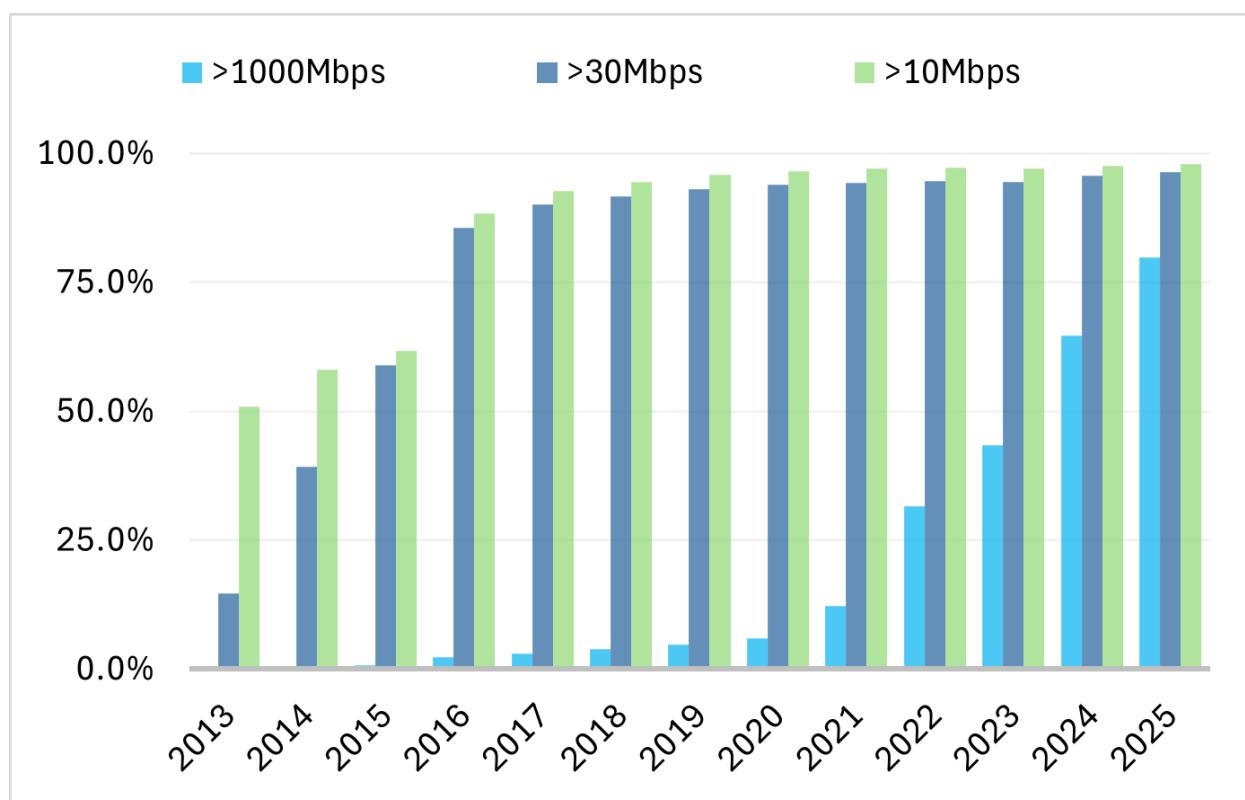


Digital Infrastructure

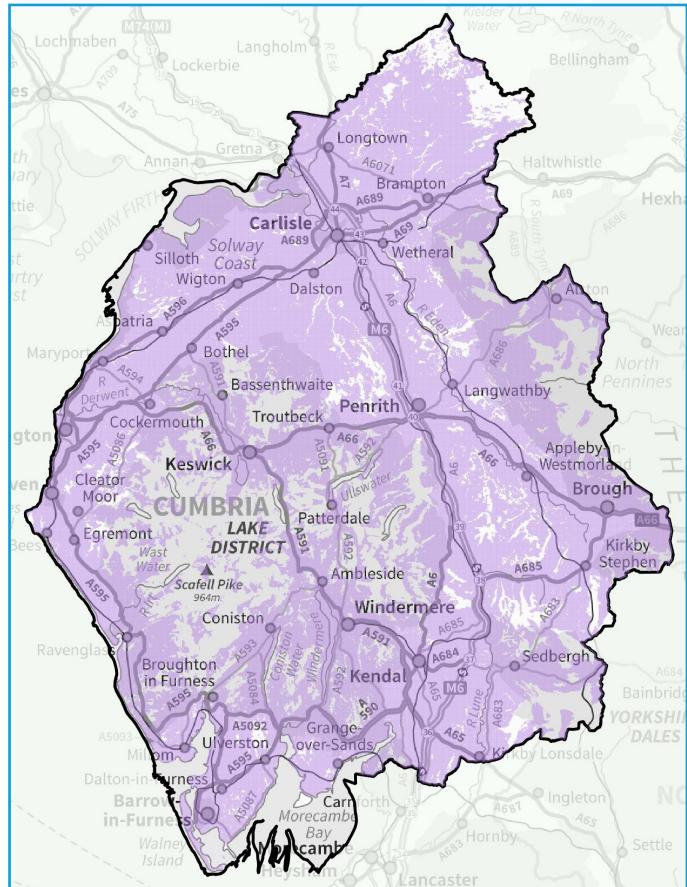
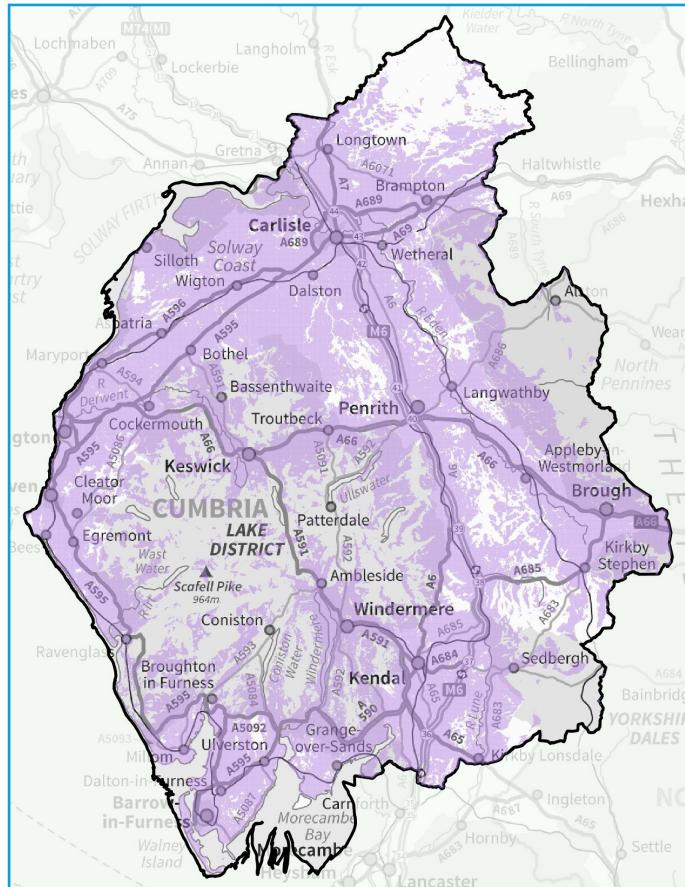
Current connectivity and ambitions

Historically Cumbria struggled to attract market investment into digital infrastructure. Cumbria was seen as a challenging location for market led deployment due to geography, geology, with only the city of Carlisle and the centre of market towns seen as commercially attractive by network providers. Since 2012, when the Connecting Cumbria programme formed, there has been significant improvements in fixed line broadband and mobile connectivity due to a combination of working with the market to reduce barriers for investment and public funded investment.

Cumbria Fixed Line Broadband Coverage Increase



Cumbria Outdoor 4G Geographic Coverage from All Mobile Network Operators



By the end of 2027 it is anticipated that:

- Over 95% of properties in Cumbria will be able to access gigabit capable fixed line broadband services
- Outdoor 4G mobile coverage from all Mobile Network Operators will cover circa 80% of the Cumbria landmass.

These levels of coverage are impressive but are still below the levels expected for the UK overall, leaving a significant number of deeply rural areas underserved. Cumbria is at risk of disadvantage if active steps are not taken to continue to drive for improved digital infrastructure.

In line with Cumbria's ambitions, values and wider strategic vision, the Cumbria Digital Infrastructure Strategy has three strategic objectives:

1. Cumbria to catch up with and keep steps with UK levels of connectivity with no one and no place left behind. Supporting connectivity for people while at home, at work or on the move.
2. Connectivity to support the delivery of innovative, inclusive and effective services across all departments of both Cumberland Council and Westmorland and Furness Council, creating the conditions for greater use of smart services and AI.
3. Deliver the connectivity to enhance business productivity, encouraging investment into the county, allowing Cumbria to secure and retain globally excellent digital activity into the future.



What are we supporting

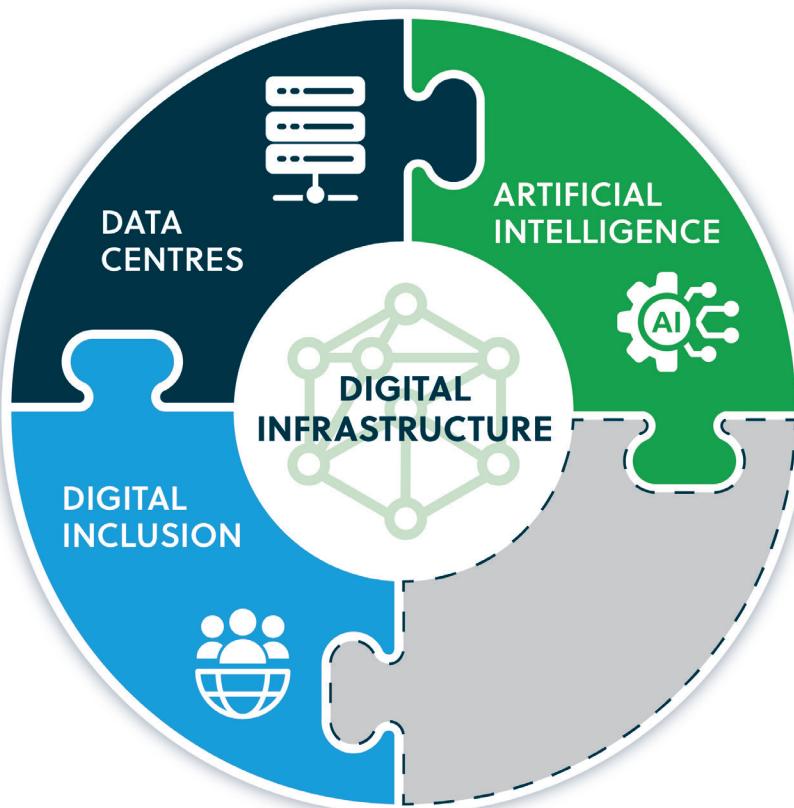
Digital infrastructure is the core of this strategy, including:

- Fixed gigabit capable connections, particularly through expansion of full fibre.
- Current generation mobile voice and data services from all of the main UK Mobile Network Operators (MNO).
- Private 5G networks.
- Alternative digital connectivity technologies such as Low Earth Orbit Satellite (LEO), Low Power Wide Area Networks (LPWAN) and new classes of mobile technology.

Improving this infrastructure will contribute to other elements and programmes across the Councils including supporting digital inclusion.

Digital infrastructure is critical to social and economic inclusion and, digital inclusion requires access to infrastructure, skills, user equipment and data. This strategy will focus on infrastructure to support programmes working on the other aspects of digital inclusion which will include the following:

- Cumberland Council Plan 2023-2027
- Westmorland and Furness Council Plan
- Westmorland and Furness Council Digital Ambition
- Digital West Cumbria
- UK Government Digital Inclusion toolkit



The digital infrastructure strategy will also support development of separate strategies, programmes and businesses cases to encourage:

- **AI systems adoption and clusters**

Cumbria is emerging as a powerful hub for AI and robotics innovation, particularly in sectors like nuclear engineering, defence systems, digital transformation and SME support. Improved digital infrastructure is already supporting these industries and further expansion of gigabit, 4G and 5G connectivity will provide opportunities for more investment and innovation.

- **Public sector digital customer services**

Both Cumbria Councils are working to develop their digital offerings allowing customers to self-serve in ways that work for them and creating tools to support improved customer services. Continuing to improve digital infrastructure, in concert with these other programmes, will provide opportunities for more Cumbrians to access these services.

- **Data centres and data centre strategy**

With Cumbria's sustainable energy assets and expanding full fibre infrastructure the county is emerging as a highly attractive location for both large and small data centres which will be critical for the UK over the next few years. The digital infrastructure strategy will support development of a data centre strategy, including measures to balance the carbon cost from use of AI and other new technologies with protecting the environment and achieving net zero. Continuing commitment to improving digital infrastructure, gigabit, 4G and 5G connectivity, alongside work on energy innovation will significantly contribute to encouraging investment and innovation in this space.

- **Infrastructure resilience**

Cumbria's geography and vulnerability to extreme weather has required the county to develop a much keener focus on resilience than less rugged areas of the UK. A clear strategy on improving digital infrastructure and encouraging investment into robust networks will support work with the Cumbria Local Resilience Forum and wider stakeholders, such as power companies, to continue to drive forward critically important improvements.



Action Plan

Connecting Cumbria's Action Plan for delivering this strategy is split between:

Making Cumbria's Voice Heard

Seek to work with UK Government to understand and support implementation of their policy for expansion and improvement of digital infrastructure and encourage development of policies which maximise delivery and resilience of infrastructure in Cumbria.

Supporting and Monitoring Investment

Supporting and monitoring the delivery of commercial and public funded programmes, such as the Shared Rural Network and Project Gigabit, to maximise delivery of investment into Cumbria. Creating accurate data to inform the development of interventions, lobbying and supporting the work of the Unitary Councils and the delivery of other public services.

Delivery of Intervention

Development and delivery of Cumbria led interventions to ensure that no one and no place is left behind.

Research and Futureproofing

Monitoring best practice and new models of public service delivery using digital infrastructure.



The Action Plan includes the following activities¹:

Making Cumbria's Voice Heard

- I. Cumbria will seek to work with UK Government to understand and support the delivery of improved broadband to the 0.3% of Very Hard To Reach properties across the UK including those in Cumbria.
- II. Cumbria will engage with UK Government, Ofcom, other rural areas and Mobile Network Operators to seek to enhance the resilience of mobile infrastructure and connectivity to all properties in Cumbria during extreme weather events and power failures.
- III. Cumbria will engage with UK Government and other public sector partners to seek to become the UK Government's preferred delivery partner in developing new interventions in the UK's digital infrastructure and digital technologies sectors.

Supporting and Monitoring Investment

- I. Cumbria will continue to support the delivery of existing public funded programmes, such as the Shared Rural Network and Project Gigabit, to maximise delivery of investment into Cumbria.
- II. Cumbria will continue to engage with commercially funded deployment programmes to encourage investment into digital infrastructure by both broadband providers and mobile network operators. Supporting engagement between companies and Council services, such as highways and planning teams, to make Cumbria as attractive a place to invest as possible.
- III. Connecting Cumbria will monitor information from multiple sources to understand in detail Cumbria's current and expected digital infrastructure footprint to seek to identify areas of challenge or opportunity.



¹Subject to formal business case development

Delivery of Intervention

- I. Cumbria will develop a toolkit of interventions to expand improved digital connectivity to the most challenging 3% of properties in Cumbria. Innovative models will be needed to expand gigabit beyond 97% and it should be noted that full fibre is likely to be prohibitively expensive for circa 0.5% of premises where different technologies will be required such as 4G, 5G, fixed wireless or Low Earth Orbit satellite.
- II. Cumbria will develop and deliver the Digital Places for Cumbria programme. Cumbria will develop a highly detailed, cloud based, iterative and manipulatable digital twin of all mobile connectivity assets in Cumbria. This model will allow us to understand how issues or changes impact mobile connectivity and identify opportunities for intervention or engagement with the market to improve services.
- III. Cumbria 5G innovation development. Cumbria is leading delivery of the Borderlands 5G Innovation Region programme for the benefit of the Borderlands Partnership. The initial funding award for the Borderlands wide programme from the Department for Science, Innovation and Technology (DSIT) is due to be fully utilised by the end of March 2026. Connecting Cumbria will seek to enhance the benefits for Cumbria from the 5G Innovation Region programme and, through investment of Cumbria funding, seek to build an ongoing Cumbria 5G innovation programme.
- IV. Cumbria will work with all the Cumbria planning authorities and encourage developers to provide the best possible digital infrastructure provision.
- V. Cumbria will develop policies which support making public assets available to host digital infrastructure.

Research and Futureproofing

- I. Connecting Cumbria will monitor digital connectivity trends in the wider UK to benchmark against Cumbria, ensuring that we don't fall behind.
- II. Connecting Cumbria will engage with local authorities and other partners to seek to become a preferred digital infrastructure delivery partner for DSIT.
- III. Connecting Cumbria will engage with the UK Telecoms Innovation Network and Rural Services Network to understand emerging issues or opportunities for further digital connectivity improvements in Cumbria.
- IV. Connecting Cumbria will work with teams in both Unitary Authorities and the new Mayoral Combined Authority to monitor developing technologies and service delivery models for improving services in Cumbria. This could include highways, traffic management, environmental monitoring and social care innovations.
- V. Connecting Cumbria will leverage learnings from the Borderlands 5G Innovation Region programme and engage with both public sector and industry partners to support the development of the advanced wireless market in Cumbria.

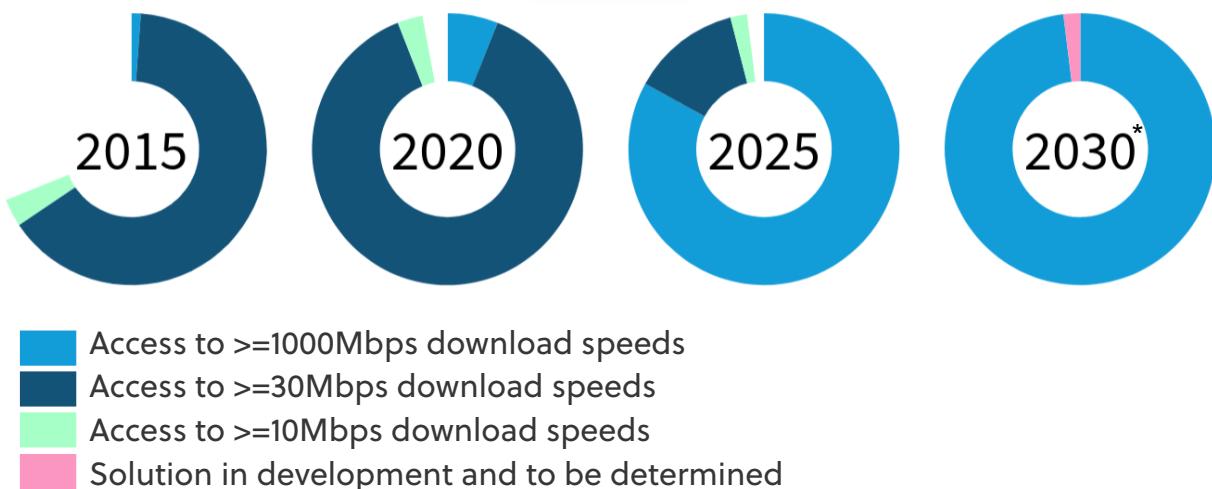
Targets and Outcomes

The target for the strategy is ensuring ubiquitous high quality digital connectivity with no one and no place in Cumbria left behind. On this basis there is no numeric target and the focus of the strategy is to strive toward 100% service coverage.

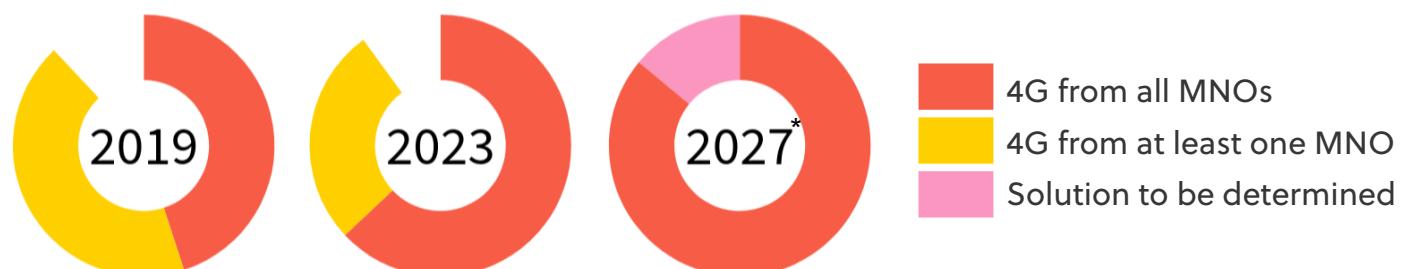
The Key Performance Indicators measured to show progress will be:

- % of properties able to access Gigabit (1,000 Mbps) services
- % of properties able to access 30Mbps (superfast) services
- % of properties unable to access services of at least 10Mbps (basic broadband)
- % outdoor geographic 4G coverage from all MNOs
- % outdoor geographic 5G coverage by from all MNOs

Fixed broadband coverage and forecast



4G coverage and forecast



5G coverage



*Forecast estimates based on best available data on 20th October 2025. Figures will be subject to change due to a number of factors, including changes in levels of commercial investment, development of Cumbria led interventions, changes in the telecoms market and UK government policies.