

COUNCILS & CONNECTIVITY 2

How prepared is local government for the future of mobile?

May 2019





BUILDING MOBILE BRITAIN



The **UK GDP** impact of mobile connectivity is anticipated to be

£112bn in **2020**, growing to

£198bn

per annum by **2030**.

92%

of UK premises have **mobile services** from all four operators.
(Ofcom)

UK indoor premises
4G coverage

65% in **2017**, growing to

77% in **2018**.

In a six month period during 2018,
MNOs added additional
4G coverage over an
area equivalent to the

size of
Wales.

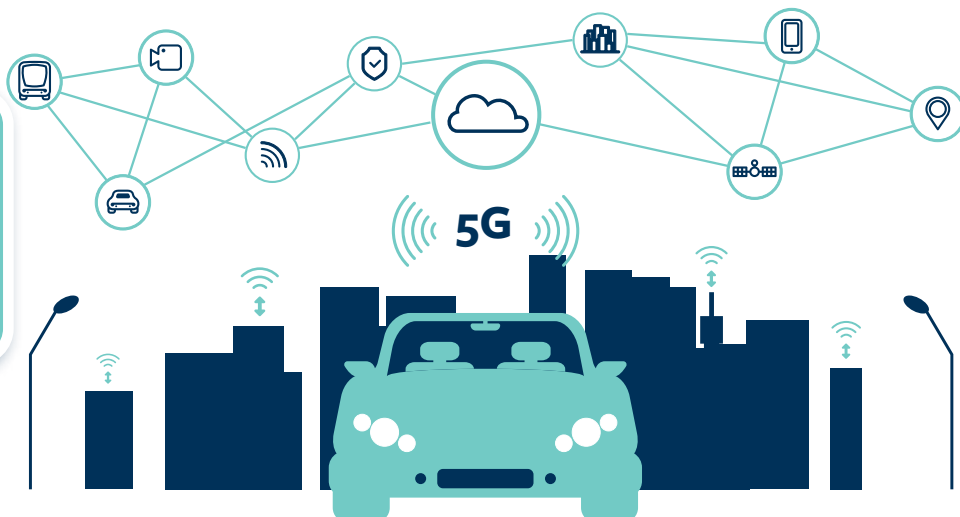
5G could facilitate 1m devices per km²,
more than **4G**.

4G **10x** **5G**

5G commercial networks
to be launched in **2019**.

5G enabled road systems could reduce
congestion by **10%**, saving the economy

£880m per year.



About Building Mobile Britain

Building Mobile Britain is a campaign that supports the mobile industry's collaboration with national and local government, regulators, industry, consumers and citizens to overcome the challenges to expanding mobile networks, whilst also developing innovative services for customers.

Building Mobile Britain is run by Mobile UK, the trade association for the UK's mobile network operators – EE, O2, Three and Vodafone. The mobile network operators are determined to continually improve and expand the UK's mobile capacity.

For further information about Building Mobile Britain visit: <http://www.buildingmobilebritain.org.uk>

For further information on the work of Mobile UK visit: <http://www.mobileuk.org/>



About this report

This report presents research on how local government is creating an environment that is conducive to mobile infrastructure being built. It has been written so as to be relevant to all tiers of local government – and will also be relevant to anyone interested in local economic development.

The research itself looked at how 60 randomly selected lower-tier or unitary local authority districts, 10 randomly selected county councils and 13 randomly selected Local Enterprise Partnerships - all in England - approach mobile connectivity. Information was collected using a combination of desk research, Freedom of Information requests and email correspondence with councils themselves. A full methodology can be found at the back of this report.

Thanks go to those who took the time to help inform the research.

This report was produced by Policy Points, a research organisation that specialises in evidence-based policy making: www.policypoints.co.uk

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KEY MESSAGES

- **Preparations for 5G and efforts to improve mobile connectivity at a local level need to be stepped up.** Mobile connectivity - and specifically 5G - will underpin the success of local economies in the future. Councils have a big influence on how mobile networks get built, from both a planning and strategic economic development perspective.
- **The current approach of councils to mobile connectivity is inconsistent, with large variations across the country.** This adds time, cost and complexity to the investment plans of mobile network operators (MNOs). A more standardised approach would create more certainty for operators to rollout their networks.
- **Local government should treat mobile connectivity and fixed fibre connectivity with equal importance.** Our research shows that there is very limited mention of mobile within strategic and economic planning, whereas there is a heavy focus on broadband.
- **Building mobile networks requires partnerships between MNOs and local government.** Mobile networks are essential national infrastructure but are ultimately delivered locally. MNOs and local government working together is essential if 4G and 5G connectivity is to be available to as many people and businesses as possible.



RESEARCH FINDINGS

- **87%** of councils had not audited their assets for suitability to host digital infrastructure.
- **74%** of councils have yet to apply for funding to improve digital connectivity.
- More than half (**56%**) of councils did not have a cabinet member with specific responsibility for digital issues.
- Council committees and job roles that are dedicated to mobile connectivity – and digital connectivity more generally – are extremely rare.
- Only **28%** of Local Plans make a detailed reference to mobile connectivity.
- Only **10%** of council economic strategies give a clear view of how mobile connectivity is critical to future economic outcomes.

RECOMMENDATIONS

- 1. Put greater emphasis on the importance of mobile connectivity to the future success of local economies.** This can be supported by the following actions:
 - Auditing public sector assets as potential locations for mobile infrastructure.
 - Learning lessons from the rollout of broadband.
 - Exploring different models of collaboration with the mobile industry.
- 2. Publish a clear statement of approach to create a positive environment to build mobile infrastructure.** This can be supported by the following actions:
 - Embedding mobile connectivity in plans for local economic development.
 - Establishing “connectivity considerations” as best practice in the planning phase of new developments.
 - Creating local government ‘digital champions’.



1

INTRODUCTION

Councils can enable connectivity

Mobile connectivity is now an essential part of daily life for residents and businesses in the UK's villages, towns and cities. Indeed, 94% of the country's adults own or use a mobile phone and there are 92 million subscriptions to mobile networks.¹

In the coming years, it is expected that the way people interact with apps, mobile content and online services will change dramatically. Connectivity today is focused primarily on the smartphone, but the future will see more and more devices connected to one another. From the connected smart home to the connected car, or the autonomous factory to remote surgery, the way people, places and machines communicate will be vastly different. However, for this to happen, mobile operators need to be able to build and deploy their networks.

Councils are – and will continue to be – instrumental in delivering mobile networks, be it through granting planning permission, ensuring future development is planned with mobile connectivity in mind, or providing their public assets to host mobile equipment. How local authorities interpret planning laws and street works rules and how they design local economic strategies has a bearing on how efficiently mobile infrastructure can be deployed. In short, councils influence the speed and cost of mobile infrastructure being built.

¹ Ofcom, 2017 Fast Facts



Through its work with local government, Mobile UK has seen first-hand how councils can be proactive in creating a better environment for mobile infrastructure to be built. The use of public assets to host mobile infrastructure, appointing ‘digital champions’, designing ambitious digital strategies and accessing economic development funds to increase rural coverage, are tools that have been used by councils to support local mobile connectivity.

In our experience, however, there is the potential for councils to go even further in embedding mobile connectivity in their policy thinking and forward planning. The purpose of the research presented in this report, therefore, is to show how local government in England can do more to improve mobile connectivity for its residents and businesses.

In presenting our research findings we recognise that there are many trade-offs when allocating scarce council resources. Local authority spending on planning and development functions has fallen by over 50% in real terms since 2010-11.² Going forward, it is important that local authorities have the funding to manage the increased planning applications and additional complexity arising from technological advancement.

In addition, we are also calling on central government to help local government. Simplifying the planning system by stepping down all telecommunications equipment into permitted development would be a positive move and would help the recognition of mobile infrastructure as part of the nation’s essential infrastructure. Equally, simplification would free up resources and costs for local authorities and the industry.

In this context, the purpose of this report is to:

- Set out why mobile connectivity is critical to the future success of local economies.
- Describe how councils currently approach improvements to mobile connectivity.
- Offer practical ideas for how councils can improve their approach to mobile connectivity.

This report complements our previous publication, *Councils and Connectivity: How local government can help to build mobile Britain*, which offered recommendations on how local government could act to create an environment that supports improvements to local mobile connectivity.



² NAO, March 2018, Financial Stability of Local Authorities



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THE FUTURE IS MOBILE



Why connectivity is critical

MNOs are continuously enhancing the capacity and coverage of their networks through sustained investment and technological advances. Indoor voice call coverage from all four MNOs is now available to 92% of the country's premises. Good indoor 4G coverage from all four MNOs is now available to 77% of the country's premises, up from 40% in 2016.³ In a six month period during 2018, MNOs added additional 4G coverage over an area equivalent to the size of Wales.⁴

These networks are critical to local economies and quality of life. Mobile network coverage is now a defining characteristic of whether a place is attractive for residents to live and businesses to locate. For example, consumer group Which? recommends that prospective home buyers check the strength of mobile signal when deciding whether to buy a house. We often talk broadly of how mobile networks benefit the national economy, but this national benefit is the aggregation of hyper-local use of mobile infrastructure.

³ Ofcom, Connected Nations, December 2018

⁴ Mobile UK analysis of Ofcom Connected Nations data.



4G



Mobile operators have ambitious plans to further enhance their networks and will soon be starting initial commercial rollout of 5G, the next generation in mobile technology. This ambition matches the Government's objective for the UK being a world leading digitally connected economy. However, mobile operators cannot achieve this objective alone – action is needed by all stakeholders, including national and local government. It is vitally important that residents and businesses can access 5G in the future. It promises to radically transform our economy and society for the better.

“ **[5G] will go beyond mobile broadband, and impact self-sustaining modern human establishments like smart cities, robotics, self-driving cars, and foster innovation in critical sectors such as healthcare, agriculture and education.** ”
(World Economic Forum.⁵)

Like every other sector, local government also stands to benefit from 5G. Mobile networks already provide residents with access to council services and council officers with the ability to work remotely. 5G will open up further possibilities, enabling local authorities to introduce efficiency-saving solutions for services such as street lighting, refuse collection and social care. One estimate has calculated that 5G-enabled efficiency gains could help councils realise £2.8 billion in savings.⁶

- **The UK GDP impact of mobile connectivity is anticipated to be £112bn in 2020, growing to £198bn per annum by 2030.⁷**
- **5G is expected to facilitate 1 million devices per square km, many times higher when compared to 4G.⁸**
- **Commuters will benefit from 5G enabled road systems that will reduce congestion by 10%, saving the economy £880 million a year.⁹**
- **The cost to the UK economy of a delay in 5G rollout is calculated at between £4.5bn and £6.8bn.¹⁰**

These forecasts indicate what is achievable if the UK is enabled to build next generation networks and lead the world in 5G connectivity. However, MNOs need to be able to build next generation networks quickly, effectively and in a manner that is economically viable. To do this will require:

- New approaches and new partnerships between local government, national government and MNOs;
- Preparatory work in terms of planning, site availability, power, fibre access and forward planning;
- All local planning decisions to consider how mobile networks are deployed and how major developments impact on existing networks.

Local councils are central to the rollout of 5G. In undertaking this report we aim to highlight the preparedness of local councils for the 5G revolution, whilst offering suggestions for how the benefits of this exciting new technology can be exploited.

⁵ World Economic Forum, January 2018, 5G Isn't Just a Buzzword. It will change the world.

⁶ O2, March 2018, The value of 5G for cities and communities

⁷ Future Communications Challenge Group, January 2017, UK Strategy for 5G and Digitisation

⁸ Ofcom, March 2018, Enabling 5G in the UK

⁹ O2, March 2018, The value of 5G for cities and communities

¹⁰ Assembly, April 2019, The Impact on the UK of a Restriction on Huawei in the Telecoms Supply Chain

3

RESEARCH FINDINGS

How councils approach connectivity

In our previous report we reached conclusions on the action councils could take to create an environment supportive of making improvements to mobile connectivity. The thinking behind why each type of action would be beneficial to mobile connectivity can be found in that report. This research was designed to understand how widely used these actions are, which fit into three themes:

1. Understanding what councils have done to support mobile infrastructure being built.

This looks at two things. The first is whether councils have conducted an audit of public buildings, structures and open land to assess their suitability for hosting digital infrastructure. The second is whether councils have applied for central government economic development funding to finance infrastructure that will improve digital connectivity.

2. Understanding what councils are doing to promote mobile connectivity. The research looked at whether councils have 'digital champions' to promote mobile connectivity. Examples of digital champions could be a councillor holding a cabinet position dedicated to improving digital outcomes, a council committee focused on local digital connectivity, or a council officer whose job is dedicated to achieving better digital outcomes. It is worth noting that the government has endorsed Mobile UK's recommendation, calling on local authorities to identify digital champions to support rollout of mobile networks.

3. Understanding how councils think about future mobile connectivity needs. Councils look to the future and think about the infrastructure and economic needs of their residents and businesses. The research looks at how mobile connectivity is included in this thinking.



The specific findings from each of the above three research themes are explained in this chapter. Under each theme a case study of best practice is presented, followed by our quantitative findings and a short analysis. A full research methodology is set out at the end of the report, but two things about our approach to the research are worth noting up front:

- The first component of our sample was 60 randomly selected councils – across varying degrees of urban/rural geography – from lower-tier or unitary local authority districts, unitary authorities, metropolitan districts and London boroughs. The second component of our sample was 10 randomly selected county councils.
- Some of our research questions looked at ‘digital connectivity’ as well as ‘mobile connectivity’. This was done to be thorough – digital connectivity is a commonly used term that incorporates mobile connectivity.

What councils have done – Audits and funding

CASE STUDY - NORFOLK COUNTY COUNCIL - USING PUBLIC ASSETS AS PART OF A BROADER MOBILE STRATEGY

In early 2018, Norfolk County Council commissioned a study to measure the quality of local mobile signal. The results were used to engage with MNOs on how signal performance could improve. Using council buildings and structures to host mobile infrastructure was identified as a way of making an improvement, and a list of council sites that could be used to host mobile infrastructure was subsequently made available to MNOs. The charges for using council sites were set well below market rates, showing that the council values better mobile connectivity over making more revenue.

This approach had two effects. Firstly, it facilitated positive conversations with MNOs about barriers to mobile infrastructure rollout. Secondly, MNOs reviewed the connectivity they were providing in Norfolk, commissioning new sites and optimising existing ones. The council is now working on making a wider set of public assets available to host mobile infrastructure, using its convening power to discuss the possibility with the police, health services and parish councils.

The use of public assets is just one part of Norfolk County Council’s strategy to support the availability of all mobile network types. This strategy includes: working with Ofcom to measure how local connectivity has improved; investing in full fibre connectivity so that fibre backhaul can be offered in the future; and, preparing for 5G technology, which could support Norfolk’s industry specialisms, such as agri-tech. This activity will enable Norfolk to support business growth and improving the quality of life for residents.



Norfolk County Council

• 87% of councils had not conducted an audit to assess whether their estate could host digital infrastructure.

Those that had audited their estate had done so to different extents. One example was a council looking at how public assets in a town centre could be used to enable a public WiFi project. Another example was a council reviewing the suitability of its assets to host digital infrastructure, subsequently changing its policy related to the hosting of digital infrastructure and making all MNOs aware of opportunities to utilise the assets. Other councils had looked at how their assets could host digital infrastructure to meet their own connectivity needs.

• Almost three quarters of councils had not applied for economic development funds to improve digital connectivity.

Where applications had been made, the overwhelming majority related to enhancing broadband connectivity, such as the Local Full Fibre Network Challenge Fund.

The main conclusion from these statistics is that auditing public sector assets and applying for economic development funds are tools that are rarely used, and when they are used the focus tends to be on fixed rather than mobile connectivity.

What councils are doing now – Councillors, committees and jobs

CASE STUDY – TAMESIDE COUNCIL

Tameside Council has put digital connectivity at the heart of its digital and economic strategies. In implementing them, the council needs to meet diverse needs, covering both urban and rural geography and supporting its rich manufacturing heritage.

The council has already made great progress in improving local fixed connectivity, including installing over 50km of ducting for fibre and making 2,000 street light columns fibre ready and available for MNOs to utilise through the Tameside Digital Infrastructure Cooperative. Following this success, Tameside is now looking at how it can improve local mobile connectivity so that it is the best it can be. Specifically, the council has an ambition to be an earlier adopter of 5G.

To this end, the council is looking at how every part of the organisation can contribute to a better investment environment for MNOs in the borough. Central to this is the creation of the 'Digital Infrastructure Group', which convenes representatives from the council's legal, estates, planning and highways departments to collaborate on lowering barriers and costs to invest. This internal activity is supported by external activity, such as community engagement that is critical to digital infrastructure projects getting the go-ahead.

The next phase of activity for Tameside Council is to enter into a dialogue with MNOs, both to promote the council's digital activity and to find out more about the future plans of operators. As it did with relationships for related to fixed connectivity, the council anticipates MNOs having a single point of contact within the local authority as part of a 'client management' model.

All-in-all, Tameside Council sees its approach to digital connectivity as vital if it is to prepare its residents and businesses for the future.



• More than half (56%) of councils do not currently have a cabinet member with specific responsibility for digital issues.

What we cannot say is how this responsibility for digital issues ranks in importance compared to other issues. Council cabinet members with responsibility for digital often have a long list of other – often unrelated – responsibilities. However, given the volume of responsibilities some council cabinet members have it is difficult to see how a large focus can be given to any one of them.

• Only one example of a council with a committee dedicated to digital.

This example is Norfolk County Council's Digital Innovation and Efficiency Committee. It should be noted, however, that other council committees would incorporate some activity related to digital. Planning committees are a case in point, given they would likely deal with applications to build digital infrastructure that does not come under permitted development.

• Four examples of councils with job titles focused on local digital connectivity.

There were plenty of examples of council job titles focused on internal digital transformation, such as upgrading digital capability and digitising service provision. Yet there were only four examples of job titles that were focused on improving the digital connectivity of residents and businesses. Three of these examples – Norfolk County Council, Cambridgeshire County Council and Herefordshire Council – were in rural areas. The fourth example was found in Nottingham City Council.

These results paint a mixed picture. While there are very few councils that have given specific focus and prominence to the digital connectivity of residents via committees and job titles, there is much greater recognition of digital connectivity in the portfolios of senior councillors (albeit with no indication of how much time senior councillors spend on this part of their portfolio).

We also asked councils for job descriptions of council officials that included references to 'digital' or 'mobile'. The thinking behind this was to understand if council employees had responsibility for digital connectivity issues despite their job title not indicating that they did. The information provided was unable to build a

consistent picture of where ‘digital’ or ‘mobile’ was a specific responsibility. Nevertheless, there were examples where councils did have specific responsibilities dedicated to digital and we found the following in the job description for the Digital Engagement Officer within Herefordshire Council:

“Maintain a comprehensive knowledge of local, regional and national issues as they relate to digital and communications matters, in order that council policy and practice can be influenced as necessary.”

How councils are thinking about the future - Local Plans and economic strategies

CASE STUDY – GREATER LINCOLNSHIRE LEP STRATEGIC ECONOMIC PLAN (SEP)

The SEP places equal importance on mobile and fixed connectivity:

“A sister project of the BDUK investment is a national £150m Mobile Infrastructure Project (MIP) which is running alongside the improvements to the UK’s broadband network.”

The SEP recognises the challenges facing MNOs in providing coverage in rural areas:

“In some areas, especially remote rural areas, it might not be cost effective for mobile operators to provide coverage.”

The SEP articulates why mobile connectivity is important:

“Good mobile coverage helps businesses to grow and people to stay in touch, which can be very important for people who are vulnerable or isolated.”



• 28% of Local Plans make a detailed reference to mobile connectivity.

By ‘detailed’ we mean the council setting out why mobile connectivity is relevant to future development needs and how it will be approached, rather than just including mobile connectivity as one of many examples of economic infrastructure that is important.

• 10% of council economic strategies give a clear view of how mobile connectivity is critical to future economic outcomes.

The strategies focus more on broadband than on mobile connectivity. Common references to the broader local digital connectivity needs of the future typically focussed on the growth of digital industries and changing working patterns. However, most descriptions of future local mobile connectivity needs were weak. Only 6% of the economic strategies we looked at made any reference to 5G.

There are some qualifications to the headline Local Plan statistics. Firstly, some Local Plans state that they follow the National Planning Policy Framework on supporting communications infrastructure. Secondly, a few councils had specific communications infrastructure policies that they signposted to in their Local Plans; other councils may have also had specific communications infrastructure policies that we could not find.

We cannot, however, qualify the statistics on local economic strategies in the same way. We found that under the present strategic planning framework the recognition of mobile was often limited. This is concerning because Local Plans cover long periods of time, often up to 20-30 years.

There are some good examples but we believe that in order to prepare the foundations for 5G, priority must be given for mobile connectivity within these plans. One area where we have seen progress towards clear prioritisation of this exciting and transformational technology was the Strategic Economic Plans of Local Enterprise Partnerships, or more recently their Local Industrial Strategies, which are now incorporating an inspiring vision for why mobile connectivity is important and why specific attention needs to be paid to it.



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CONCLUSION



The opportunity to improve current and future mobile connectivity

The headline message from the research is that there is a huge opportunity for councils to support improved mobile connectivity for their residents and businesses. They can do this in two broad ways, that have specific supporting actions:¹¹

1. Put greater emphasis on the importance of mobile connectivity to the future success of local economies.

- *Audit public sector assets as potential locations for mobile infrastructure.*
- *Learn lessons from the rollout of broadband.*
- *Explore different models of collaboration with the mobile industry.*

2. Publish a clear statement of approach to building mobile infrastructure.

- *Embed mobile connectivity in plans for local economic development.*
- *Establish “connectivity considerations” as best practice in the planning phase of new developments.*
- *Create local government ‘digital champions’.*

¹¹ Supporting actions are taken from the first Councils and Connectivity report.



Put greater emphasis on the importance of mobile connectivity to the future success of local economies

As explained in the introduction, mobile connectivity is fundamentally important to achieving positive economic outcomes. Its importance is only likely to grow. This will affect every sector in every part of the country. Yet, generally speaking, councils do not think about their future mobile connectivity needs in the same way that they think about other types of essential economic infrastructure like roads, housing, utilities and even broadband.

Moreover, councils should take local mobile connectivity as seriously as they take internal digital transformation. The large majority of councils had job roles that focussed on their own use of digital technology. Examples included roles related to digital marketing and communications, incorporating digital technology into service provision and upgrading the council's own digital infrastructure. In short, councils clearly recognise that digital can vastly change their own organisations. This recognition needs to be applied to improving the mobile connectivity of their residents and businesses.

We appreciate that improvements to mobile technology can move faster than councils update their thinking about their future economic development needs. For instance, some current Local Plans were published before 4G technology was even launched. Yet it is vital that councils attempt to understand why good quality mobile connectivity will become more important, and what they need to do to ensure that local residents and businesses have access to the best possible mobile connectivity in the future.

Recommendations on how councils can put greater emphasis on mobile connectivity are:

- **Audit public sector assets as potential locations for mobile infrastructure.** Using public buildings, structures and open land to install mobile infrastructure has supported widespread improvements to connectivity. The charge for use of these assets should be set on the basis set out in the Electronic Communications Code, and not at rates that disincentivise investment.
- **Learn lessons from the rollout of broadband.** There are numerous examples – such as Connecting Devon and Somerset and Connecting Cambridgeshire – of how concerted effort has improved broadband provision in local areas.
- **Explore different models of collaboration with the mobile industry.** Examples of current partnerships include regular catch-up meetings and roundtables, which support a collaborative approach between the mobile industry and local political and business leaders.

Publish a clear statement of approach to building mobile infrastructure

There are large inconsistencies in how councils approach making improvements to mobile connectivity. It has been well documented that councils can have very different interpretations of rules related to the deployment of mobile infrastructure. It also makes intuitive sense - different communities have different levels of coverage, which will be reflected in how much they prioritise mobile connectivity as an issue.

Our research highlighted other sources of inconsistency. Some councils have audited their estates or applied for economic development funds to improve mobile connectivity and some have not. Some councils have 'digital champions' that can act as a point of contact for MNOs and some do not. Some councils give clear indications how mobile connectivity fits into their development plans and economic strategies and some do not.

Taken together, these inconsistencies mean that MNOs do not always know where they stand with councils, adding to the cost and time it takes to deploy mobile infrastructure. Publishing a clear statement of approach to building mobile infrastructure - whether in a Local Plan, economic strategy or as a stand-alone document - would allow MNOs to have a better idea of a council's standpoint. It would also help ensure that mobile connectivity is considered within every strand of a council's policy thinking.

Recommendations on how councils can make clear statements of approach to building mobile infrastructure:

- **Embed mobile connectivity in plans for local economic development.** The development of mobile infrastructure should be included in Local Plans and all other types of local economic strategy.
- **Establish “connectivity considerations” as best practice in the planning phase of new developments.** Any development – from upgrades to the road network to new housing estates – should consider connectivity requirements prior to construction beginning, not after construction is complete.
- **Create local government ‘digital champions’.** This could be a Local Authority cabinet post or committee focussed on mobile connectivity, a senior role dedicated to making better use of mobile/digital technology (such as a Chief Digital Officer) or a council officer with responsibility to improve mobile connectivity. Digital champions provide a single point of contact and responsibility for mobile connectivity and will also be in a unique position to align competing interests within a local authority such as economic development, property, planning and politics.

We hope that the research and conclusions included in this report will be used by councils to reassess their own approach to mobile connectivity. It is also important to note that we are not suggesting councils implement untested ideas. In this report we have presented case studies setting out how councils have pioneered new approaches to improving mobile connectivity. By following these best practice examples councils can help to build mobile Britain, both now and in the future.

Methodology

The research looked at how local government in England approaches mobile connectivity:

1. 60 randomly selected councils from lower-tier or unitary local authority districts, unitary authorities, metropolitan districts and London boroughs.
2. 10 randomly selected county councils.

Information was collected for each of the councils in the sample using mixed methods:

- Local Plans and economic strategies were found using internet search engines, with email contact made with the relevant council if the documents could not be found. The Local Plans and economic strategies were then assessed using a series of search terms relevant to mobile and digital connectivity, i.e. “mobile”, “telecom” and “mast” etc.
- Details of audits of public sector assets, applications for economic development funds and job descriptions of roles related to mobile connectivity and digital were all solicited using Freedom of Information requests. Where clarification was required on answers, follow-up emails were sent.
- For information on councillors and council committees relevant to mobile connectivity and digital we used internet searches. Often, the information was not obvious - particularly related to councillors that have responsibility for digital - and when this arose we followed up with email requests for information.

For the analysis of LEP Strategic Economic Plans, 13 were selected at random (13 being one-third of the total number of Strategic Economic Plans available). Again, search terms related to mobile were used to search for information relevant to mobile connectivity.

