

PURPOSE OF REPORT

- 1.1 To seek approval to commit £xxx,xxx funding to extend superfast broadband coverage within Charnwood, to be invested through the Superfast Leicestershire programme.

RECOMMENDATIONS

- 2.1 To approve an investment of £xxx,xxx to improve superfast broadband coverage within Charnwood.
- 2.2 To promote and support demand simulation initiatives to maximise the uptake of superfast broadband and to ensure residents and businesses realise the benefits it offers.
- 2.3 To work collaboratively with partners and the private sector to develop solutions for 'the final 5%' of communities in Charnwood who will not have access to superfast broadband by the end of September 2018.

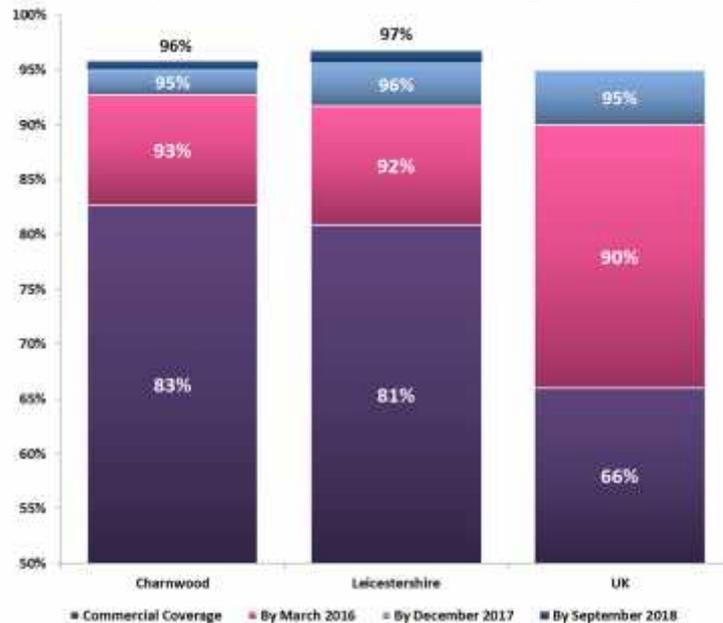
BACKGROUND

- 3.1 Superfast Leicestershire is a multi-million pound project led by the County Council, in partnership with British Telecommunications (BT), the Leicester and Leicestershire Enterprise Partnership (LEEP), Broadband Delivery UK (BDUK) and district councils. The aim of the project is to bring superfast broadband access to areas not served by commercial operators.
- 3.2 The programme is being delivered across two phases. In August 2013 BT was awarded the Phase 1 contract with approved State Aid funding of up to £10.5m. This included a £100,000 investment from Charnwood Borough Council.
- 3.3 Phase 1 delivery ran from April 2014 to March 2016. Almost 65,000 homes and businesses across Leicestershire have been connected to a fibre broadband network as a result of this deployment. It has been delivered on time, achieving better than expected coverage and has come in significantly under budget.
- 3.4 The County Council secured further funding for Phase 2 with the contract again awarded to BT in March 2015; with State aid approved public funding of up to £10.2m. BT is a major programme funder investing more than £7.5m in capital costs and over £7.6m in operating costs across both contracts.
- 3.5 In March 2017 the County Council extended the Phase 2 rollout adding three additional quarters of build to the programme with a further £4.4m investment.
- 3.6 The Phase 2 rollout, including this new extension runs from April 2016 to September 2018. It will see over 25,000 properties connected to fibre broadband with almost 20,000 due to gain access to superfast speeds.

SUPERFAST COVERAGE IN CHARNWOOD

- 4.1 Commercial operators such as BT, Virgin Media and Warwicknet have been rolling out superfast broadband where profitable, with the commercial footprint across Leicestershire reaching approximately 81% of all premises.
- 4.2 Through commercial provision, 83% of Charnwood properties gained superfast access, leaving behind a significant number of homes and business on much slower speeds.
- 4.3 By the end of March 2016, Superfast Leicestershire had ensured coverage across Leicestershire had increased to 92%. The Phase 2 rollout will see this rise to 96% with a further increase through the new Phase 2 extension - to 97%.
- 4.4 In Charnwood the coverage increase delivered by Superfast Leicestershire is shown in Figure 1, below.

Figure 1: Charnwood Superfast Broadband Coverage Comparison



- 4.5 The number of homes and businesses within Charnwood that have or will benefit through the programme is as follows:
-) Phase 1 delivery - almost 12,000
 -) Phase 2 delivery - over 1,500
 -) Phase 2 extension - over 400
- 4.6 Significant infrastructure build has already taken place in Charnwood and substantial further build is planned to take place to the end of September 2018. The main elements of the network build include:
-) Fibre enabling and capacity building within (Head End) telephone exchanges.
 -) Deploying miles of new fibre optic cabling.
 -) Installation of roadside fibre broadband cabinets used for areas being upgraded through Fibre to the Cabinet (FTTC) solutions.

-) Network rearrangement of the existing copper and fibre network where required.
-) Installation of Passive Optical Network (PON) points for areas being upgraded through Fibre to the Premise (FTTP) technology.
-) Connecting power supplies to each new structure.

IMPACT OF SUPERFAST COVERAGE

- 5.1 Superfast broadband is a critically important infrastructure now commonly referred to as the ‘fourth utility’. It is an essential driver for economic growth and innovation. Business retention, jobs creation and inward investment are all interdependent on having ready access to superfast broadband.
- 5.2 Digital infrastructure opens up new opportunities for businesses with research suggesting that increased broadband speeds alone could add £17bn to UK economic output by 2024.¹
- 5.3 Improvements to digital infrastructure are felt most in rural areas. Supporting the rollout of superfast broadband to rural areas enables new businesses to locate and grow there. It is estimated that an increase in broadband penetration of 10% yields a 0.25% increase in GDP growth.² In Charnwood superfast broadband coverage will increase by 13% through existing Superfast Leicestershire build plans, representing a huge potential economic benefit.
- 5.4 It is estimated that for every £1 invested in broadband the economy will benefit by £20. Approximately a fifth of the public investment in the Superfast Leicestershire programme will be spent in Charnwood. That means for every £1 that Charnwood Borough Council has invested a further £36 of public funding has been applied giving an estimated overall economic benefit of £72m for the area. In total £2.3m of private sector funding has been leveraged for work being completed in Charnwood.
- 5.5 Small businesses in the district will be the biggest beneficiaries of superfast broadband. The benefits available include:
-) Increased productivity and improved customer service through faster upload and download speeds.
 -) Growing and accessing new markets through better communication with customers and suppliers.
 -) Increased efficiency and employee effectiveness.
 -) Increased security through fast secure backup of data.
- 5.6 As well as the benefits for businesses, significant cost savings will also become available to residents. For example, UK household savings of £45 million a year are anticipated by 2024 as increasing numbers of people are able to work from home.

¹ SQW (November 2013) UK Broadband Impact Study: Impact Report

² See research by Aberdeen and Oxford Universities available at <https://www.abdn.ac.uk/news/8127/> and OECD report across 22 countries <http://tinyurl.com/jmjra9j>

- 5.7 This will have a positive knock on impact on the environment with a reduction of around 0.4 million tonnes a year of CO2 emissions through reduced commuting, business travel and firms shifting to more energy-efficient cloud computing.
- 5.8 Substantial savings are also likely to be achieved over the long term to all public sector budgets with a shift to delivering many services online.
- 5.9 In terms of quantifying the impact per SME, the prevailing, research based conclusions are that fibre broadband provides a dramatic financial advantage.
- 5.10 The costs of broadband infrastructure are modest compared with the benefits and savings they facilitate.³ In summary, superfast connectivity such as fibre broadband enables:
-) Increased productivity: employee productivity will be increased, having a direct impact on GVA. Businesses enabled with access through the programme will experience increased productivity within their workforce.
 -) Growth in the knowledge economy: fibre access will contribute towards the growth of a knowledge based economy, resulting in the creation of high value jobs and increased salaries for employees moving into this sector within the region.
 -) Consumer surplus: a residential consumer surplus of at least £10 per household each month is anticipated. This surplus is then available to be reinvested with local businesses.
 -) Cloud computing: access to fibre will promote more widespread use of cloud computing. The value to businesses of cloud computing is a marked decrease in processing power required to complete tasks, i.e. a cost saving on computer equipment, with low cost alternatives becoming viable. It is anticipated that a 10% reduction in total cost of ownership would be achieved for IT purchases or upgrades.
 -) Remote learning: fibre availability will support distance learning, with businesses able to access remote training and conference facilities. This has obvious long term financial benefits and significant potential cost savings for each business.
 -) Environmental: fibre access will enable more employees to adapt to flexible working, producing a positive impact on the environment but also offering substantial cost savings to businesses. Absenteeism is reduced, mileage expenses decrease and productivity improves. Flexible working via fibre connectivity also creates opportunities for people who are otherwise economically limited or inactive (e.g. through mobility issues).

NEW PROCUREMENT

- 6.1 Without further public investment there is a risk that many households and businesses in Charnwood will not be able to access the benefits of superfast broadband. At the end of September 2018 the number of properties without access in Charnwood will be more than 3,000.

³ 2See, Dini, P., Milne, C. and Milne, R., "Costs and Benefits of Superfast Broadband in the UK", London School of Economics, 2012. Available at: http://eprints.lse.ac.uk/43651/1/libfile_REPOSITORY_Content_Dini,%20P_Costs-and-Benefits-of-Superfast-Broadband.pdf

- 6.2 The County Council intends to extend the scope of the Superfast Leicestershire programme through the investment of further funding later this year. The County Council will run an OJEU procurement to secure a delivery partner for a Phase 3 rollout.
- 6.3 Prior to this an Open Market Review will be conducted to establish which properties within Charnwood and across Leicestershire need to be targeted with further investment. A Public Consultation will follow.
- 6.4 As a minimum, £5.6m will be invested through Phase 3, including £2.46m of funding underwritten by the County Council. It is clear that this range of funding will be insufficient to reach all properties in the 'Final 3%' of the county who will remain without access to superfast broadband.
- 6.5 By the end of September 2018, coverage in Charnwood is anticipated to reach 96%. Without knowing which supplier will deliver the next phase of the programme, the technology they will deploy or their cost base, it is difficult to assess what will remain after Phase 3 completion.
- 6.6 A review of publicised broadband contracts recently awarded elsewhere in the UK provides an indicative range for how many properties are likely to be served through a £5.6m investment. This does not take account of local conditions such as geography, premise clustering or rurality. However, for Charnwood the existing committed Phase 3 funding could bring superfast access to a further 650 to 1,100 properties. That would bring the area to around 97% coverage overall.
- 6.7 This would leave behind approximately 2,100 properties on much slower speeds. By investing £xxx,xxx together with the County Council as part of this new Phase 3 procurement, Charnwood Borough Council will be ensuring that some of these remaining properties join those on the other side of the digital divide with access to superfast broadband.
- 6.8 Government had previously committed to match fund any new council investment in the programme, up to £1.5m. This offer has now lapsed, however it is still possible if not probable that Government will match Charnwood Borough Council's contribution in full.

RESOURCE ISSUES

- 7.1 It is proposed that the full £xxx,xxx investment is committed to the Superfast Leicestershire programme to extend the reach of superfast broadband within Charnwood and across Leicestershire.
- 7.2 An updated collaboration agreement with the County Council will be signed which will contractually commit this funding.
- 7.3 The County Council will continue to act as the lead authority for Superfast Leicestershire and will meet the revenue costs associated with project management and governance.

- 7.4 The cost of technical analysis and support, provided by the programme's technical advisors Farrpoint will also be met by the County Council.

OPTIONS

- 8.1 An alternative to investing would be to actively encourage the market to address the connectivity gap within Charnwood. Whilst this should be pursued, it is apparent that there is a market failure that cannot be resolved without significant public sector intervention.
- 8.2 The UK Government is also in the process of introducing a broadband universal service obligation (USO) that would give everyone a right to a decent broadband connection upon reasonable request. The proposal is that the USO would provide for access to at least 10Mbps, however some costs are likely to be borne by those requesting this service. In any event, a 10Mbps connection does not offer the same future proofed opportunity that is being delivered through Superfast Leicestershire.
- 8.3 Another option is to await the outcome of the County Council's new procurement process. Once a supplier has been chosen the County Council could confirm a more accurate position on the number of properties in Charnwood which will remain without access to high speed broadband.
- 8.4 It is highly likely that this new procurement will see additional properties within Charnwood being upgraded. However, it is known that the available funding is not sufficient to reach all remaining properties in the area.
- 8.5 Investing as part of this new procurement offers economies of scale. It will help attract competitive bids from a range of potential suppliers and will help to maximise delivery within Charnwood as quickly as possible. It will help the area maintain parity of coverage with other areas of Leicestershire and our Midlands neighbours. This is vital for continued and improved economic growth within Charnwood.
- 8.6 In isolation the proposed investment is not sufficient to secure a delivery partner capable of deploying superfast connectivity to significant numbers of properties within Charnwood.
- 8.7 The preferred option is therefore to invest £xxx,xxx through the Superfast Leicestershire programme.

LEGAL ISSUES

- 9.1 A Collaboration Agreement was in place with the County Council as part of the previous investment in Phase 1 of Superfast Leicestershire. A refreshed or new agreement will be required before funding is transferred.
- 9.2 Neither the County Council nor any other funding partner will own any of the infrastructure assets deployed as part of the expected new rollout. There will be no ongoing liability placed on any funding partner.

- 9.3 The County Council as the contracting body will be liable for compliance with all procurement and State Aid requirements and regulations. Although there is no longer a national broadband framework, the County Council will work closely with BDUK to ensure that any risk of overspend on the new rollout will be met by the successful bidder. In the unlikely event, Charnwood Borough Council will not be liable for any shortfall in funding.

EQUAL OPPORTUNITIES

- 10.1 The deployment of improved broadband connectivity will help ensure that Charnwood residents and businesses have access to a range of online and digital services. A full equality impact assessment has been undertaken by the County Council as part of the programme to ensure all Leicestershire residents are best able to benefit from improved broadband connectivity.

RISK MANAGEMENT IMPLICATIONS

- 11.1 All strategic, commercial, project and delivery risks will be managed by the County Council's Broadband Team and reported as required through the Superfast Leicestershire Strategic Management Board.
- 11.2 Copies of the programme risk log are provided to the programme's Liaison Group which includes officer representation from Charnwood Borough Council.
- 11.3