Agenda item 8

DERBYSHIRE COUNTY COUNCIL

RESOURCES IMPROVEMENT AND SCRUTINY COMMITTEE

20 July 2017

REPORT OF THE CHAIR OF THE RESOURCES IMPROVEMENT AND SCRUTINY COMMITTEE

REVIEW OF BROADBAND ACCESS – STATUS REPORT

1. The Purpose of the Report

To inform the Committee of the status of the review of broadband access in Derbyshire.

2. Information and Analysis

In July 2016 the Resources Improvement and Scrutiny Committee began a review of broadband access in Derbyshire. The working group Members at that time were Cllrs Moesby (Chair), Lauro, Booth, Marshall-Clarke and Kemp.

The main objectives of the review were to consider:

- How well rural communities are connected;
- How businesses are benefitting from the Digital Derbyshire programme
- What plans are in place to provide affordable alternative solutions to rural areas where the broadband services have not been upgraded.

The working group held a series of meetings with the Digital Derbyshire Programme Manager, met with BT's Regional Partnership Director and Contract Manager and consulted all Derbyshire parish councils about access to broadband in their areas.

In the lead up to the 2017 Derbyshire County Council Elections work on the review was paused. The information that had been gathered up to that point has been collated in the attached interim report (Appendix 1). As the review is still ongoing, the report does not draw any conclusions

or make any recommendations; its purpose is to provide an overview for the new Members on the Committee.

At Appendix 2, the Digital Derbyshire Programme Manager has provided a report which sets out the latest position of the fibre broadband programme and addresses some of the issues raised in the working group's interim report.

3. **Considerations**

The relevance of the following factors has been considered in preparing this report; Finance, Human Relations, Legal and Human Rights, Prevention of Crime and Disorder, Equality and Diversity, Environmental, Health, Property and Transport

4. Recommendations

The Resources Improvement and Scrutiny Committee is asked to;

(1) Note the evidence gathered so far by the review working group (Appendix A) and the information provided by the Digital Derbyshire Programme Manager (Appendix B).

Councillor Tony Kemp

CHAIR, RESOURCES IMPROVEMENT AND SCRUTINY COMMITTEE

Appendix 1

Access to Broadband in Derbyshire

A review by Derbyshire County Council Resources Improvement and Scrutiny Committee

Interim Report
February 2017

Interim Report

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1. Scope of the Review

The Resources Committee, at its meeting on 21 July 2016, approved a scoping report for a review of broadband access in Derbyshire.

It was agreed that the main objectives of the review would be to consider:

- How well rural communities are connected
- How businesses are benefitting from the Digital Derbyshire programme
- What plans are in place to provide affordable alternative solutions to rural areas where the broadband service has not been upgraded.

It was proposed that evidence will be sought from a number of sources including;

- Cabinet Member for Highways Transport and Infrastructure
- Digital Derbyshire programme leads
- Community and business representatives
- BT
- Providers of alternative technologies that deliver reliable broadband speeds to “hard to reach” rural areas.

2. Background information

2.1 Government Policy and BDUK Delivery Model

The Government defines superfast broadband as broadband that provides download speeds of 24Mbps. In many parts of the UK superfast broadband has been rolled out on a commercial basis by providers such as BT and Virgin Media. In areas where commercial roll-out is not viable the Government’s Policy is to provide funding to support the roll-out of superfast broadband. This tends to be in, although not restricted to, rural areas.

Broadband Delivery UK (BDUK) , a unit within the Department for Culture , Media and Sport, is responsible for implementing the Government’s policy on superfast broadband and acts as a conduit for the central programme funds. The delivery of individual schemes, are the responsibility of the relevant local authority.

The Government’s policy identifies three stages with distinct targets for the roll-out of superfast broadband:

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- to provide superfast broadband coverage to 90% of UK premises by early 2016 and access to basic broadband (2Mbps) for all from December 2015 – “Phase 1”
- to provide superfast broadband coverage to 95% of UK premises by the end of 2017 – “Phase 2”
- to explore options to provide superfast coverage to the hardest to reach parts of the UK - “the final 5%”

2.2 Digital Derbyshire

Digital Derbyshire is the branding used for Derbyshire’s local broadband project. As the local authority Derbyshire County Council is responsible for the development and delivery of the local broadband plan. It also acts a “middle man” allocating government funds (administered by BDUK) to BT Openreach for the installation of local infrastructure projects.

2.3 Technology options for broadband

In the UK the term “broadband” is used to describe high-speed Internet access. The main technologies that enable individual properties to access broadband are described below.

2.3.1 Fixed Line broadband

Fixed line broadband refers to an internet connection to a home or business that is delivered via the phone line or through the provider's network of cables. The technology supporting the connection will either be superfast fibre optics or standard ADSL. A router is then used to connect devices via Wi-Fi or an Ethernet cable.

In the case of fibre enabled broadband the two main approaches adopted are either Fibre to the Premises (FTTP) or Fibre to the Cabinet (FTTC).

Fibre to the Cabinet is the most widely available form of superfast broadband infrastructure used in the UK. Fibre from the exchange is installed to a nearby street cabinet and the connection to the property is completed using the existing copper telephone lines. FTTC connections can typically handle speeds of up to 80 Mbps but this speed will decrease the further the property is from the cabinet.

Fibre to the Premises is where optical fibre is run directly to

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each premises. This can achieve download speeds of up to 1 gigabit per second and very fast upload speeds, making it a reliable future proof internet connection for businesses and people working from home.

2.3.2 Fixed Wireless Broadband

Fixed wireless broadband uses specific frequencies of the radio spectrum to transmit signals through the air (radio waves). It enables connectivity without the need for a physical (wired) connection. A small dish attached to the side of a property is linked to a local transmitter which is connected to the fibre network spine. Most wireless internet service providers (ISPs) only offer limited coverage in very localised areas (e.g. rural villages), however their price and performance tends to be good. Typical speeds achieved can be up to 50-60Mbps.

2.3.3 Satellite Broadband

Satellite broadband is another way of achieving connectivity without the need for a physical (wired) connection. The property owner needs to have a satellite dish installed and to purchase an internet satellite package which, at the moment, is likely to be more expensive than a fibre or fixed wireless package. Satellite usage allowances tend to be quite restrictive too so a consumer can soon run up excessive use charges by exceeding the limit. There are some geographical limitations to the availability of satellite broadband and, where it is available, bad weather, such as heavy rain, can obstruct the line-of-sight between the dish and the orbiting satellite, which sometimes results in disrupted connectivity. The latency of satellite services can affect the quality of certain internet applications such as fast paced multiplayer gaming. Typical speeds offered in the UK can be up to 22 Mbps. .

2.3.4 Mobile Broadband

Mobile broadband works by connecting to a mobile network with a SIM card. It doesn’t require a physical (wired) connection. It's the internet that smartphones use, either 3G or the faster and more reliable 4G. Consumers can connect to mobile broadband by using a dongle, portable Wi-Fi hotspot, a SIM card in a tablet or laptop, or by tethering from a mobile phone. For any given data limit per month, mobile packages tend to be more

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expensive for consumers than fibre or fixed wireless packages.

3. Initial Research

The House of Commons Library produced a report (dated February 2017) that used Ofcom data to analyse broadband coverage and speeds in the UK. The information pertaining to Derbyshire is presented in the figures below and is categorised according to parliamentary constituencies.
Due to variations in broadband performance over time, the information should only be considered as an indicative snap shot of the fixed broadband infrastructure in Derbyshire as at June 2016.

Figure 1 shows that with the exception of Erewash and Mid Derbyshire average download speeds in Derbyshire are below the UK average of 37.8Mbps.

Across most of Derbyshire Superfast broadband availability (defined by Ofcom as at least 30Mbps) is above or close to the UK average of 88% (as shown in figure 2). However in Derbyshire Dales availability is markedly lower (64%) and in High Peak it is also low at 82.4%.

Derbyshire Dales has a higher than average percentage of connections that are unable to receive 10Mbps (18.8% compared to the UK average of 4.9%, as illustrated in figure 3)

The percentage of connections receiving very slow speeds, of under 2 Mbps, is higher in the majority of parliamentary constituencies in Derbyshire than compared to the UK average (figure 4) This is also true for connections receiving speed of under 10Mbps (figure 5).
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The UK average for the percentage of connections receiving superfast speeds (defined as being over 30 Mbps) is 40.8%. Only Erewash and Mid Derbyshire exceed this figure. All other constituencies in Derbyshire fall short of the national average (figure 6)

In summary, the figures show that broadband coverage and speeds are not consistent across Derbyshire. And with the exception of Erewash and Mid Derbyshire are frequently below the national average. In particular Derbyshire Dales and to a lesser extent High Peak and South Derbyshire are poorly served.

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Figure 1 Average Download Speed

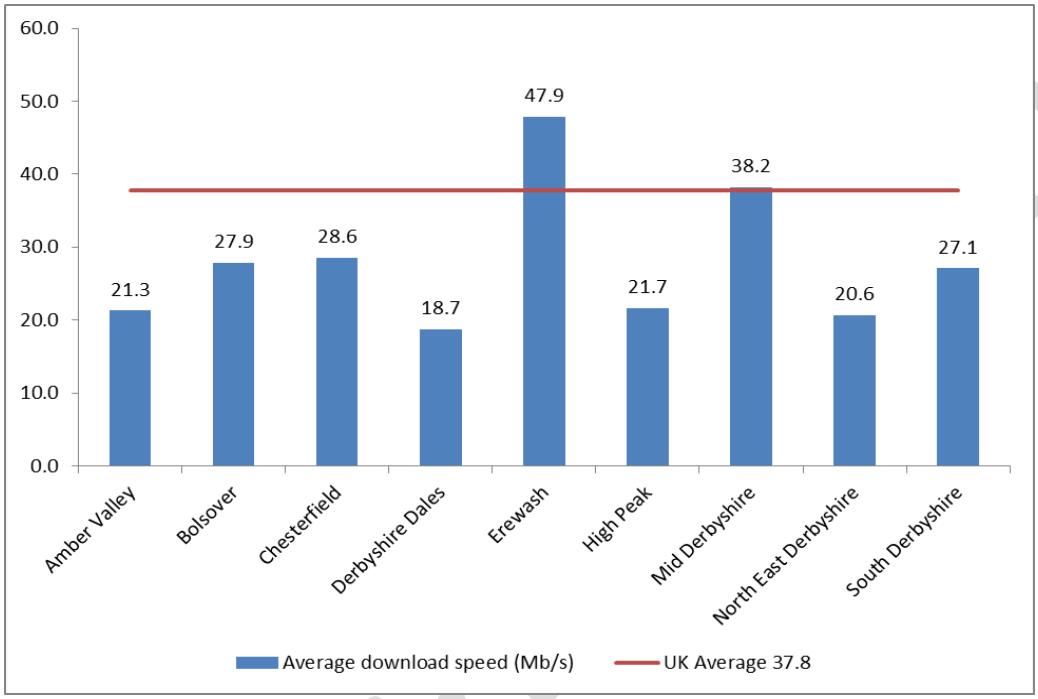


Figure 2 Superfast Broadband Availability (%)

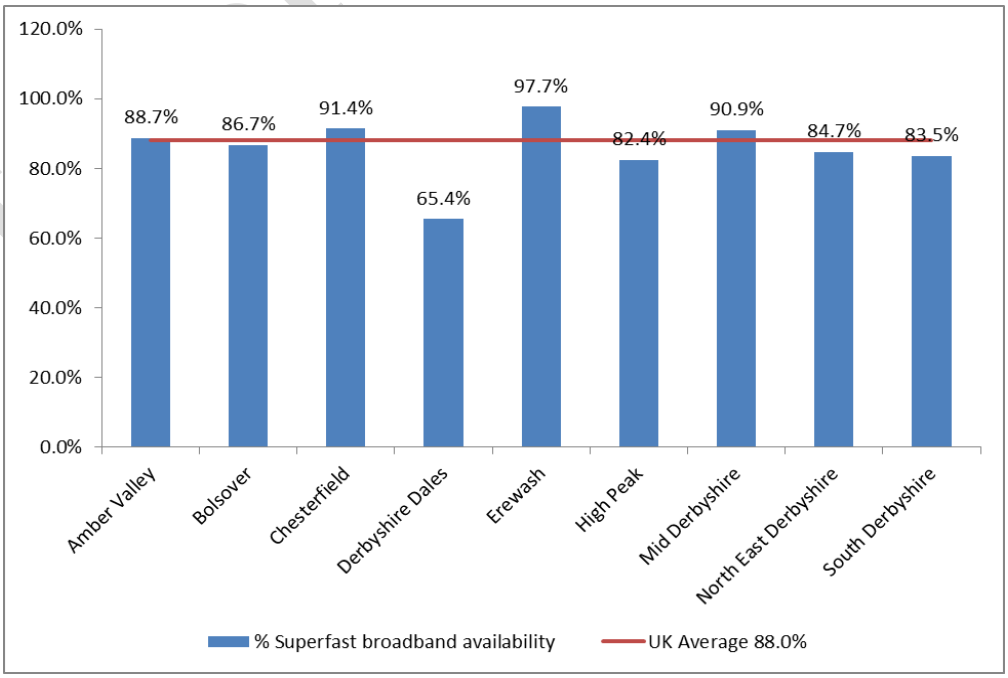


Figure 3 Percentage of connections unable to receive speeds of 10Mb/s

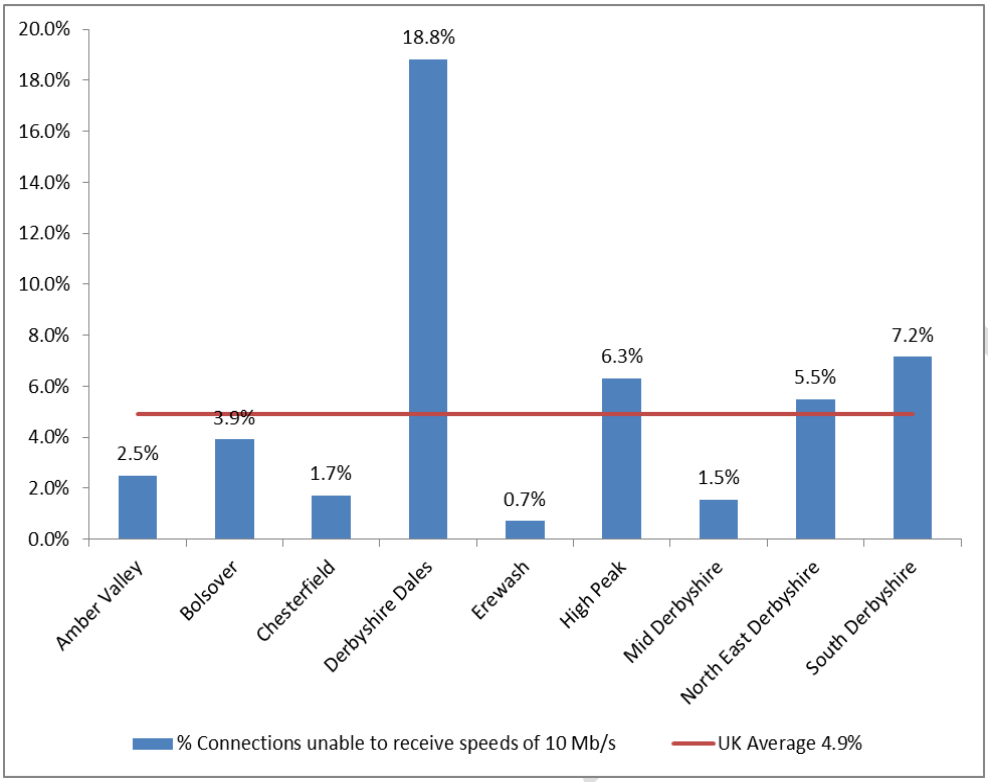


Figure 4 Percentage of connections receiving the slowest speeds (under 2 Mb/s)

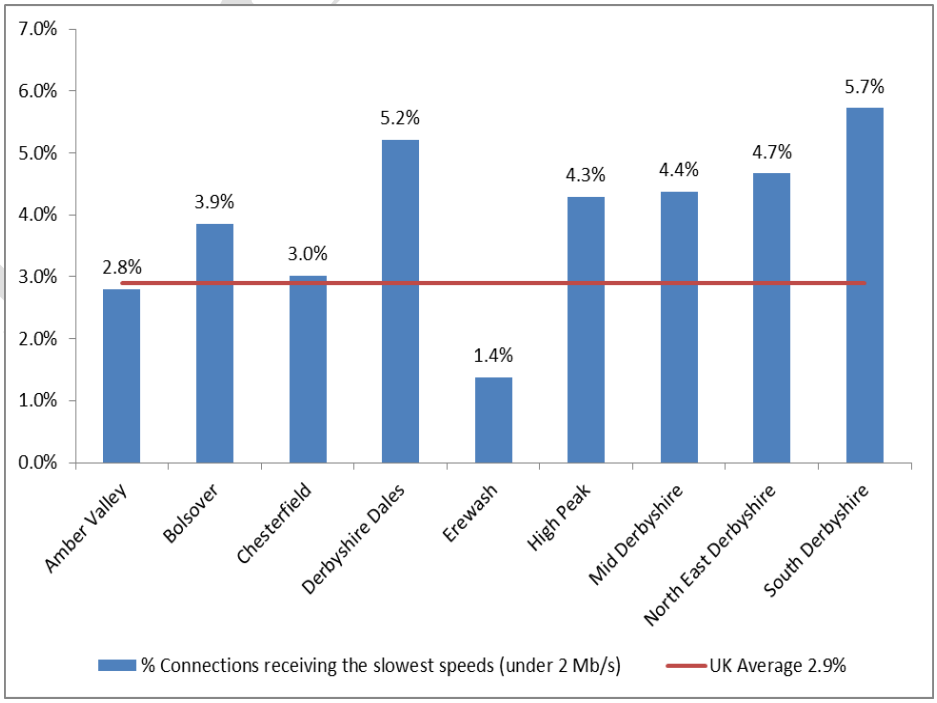


Figure 5 Percentage of connections receiving the slower speeds (under 10 Mb/s)

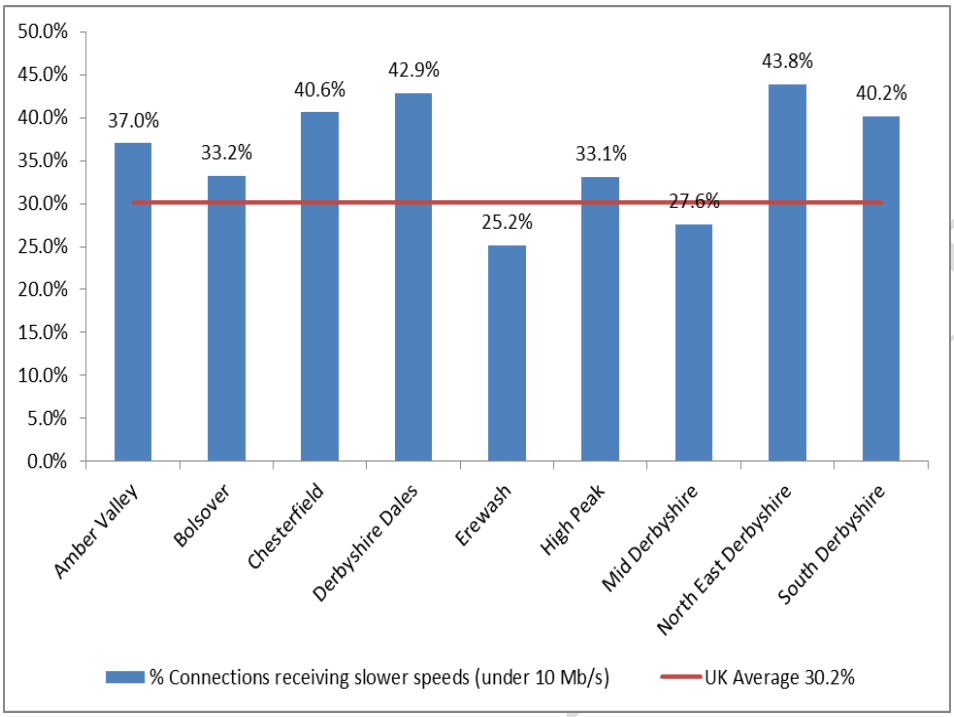
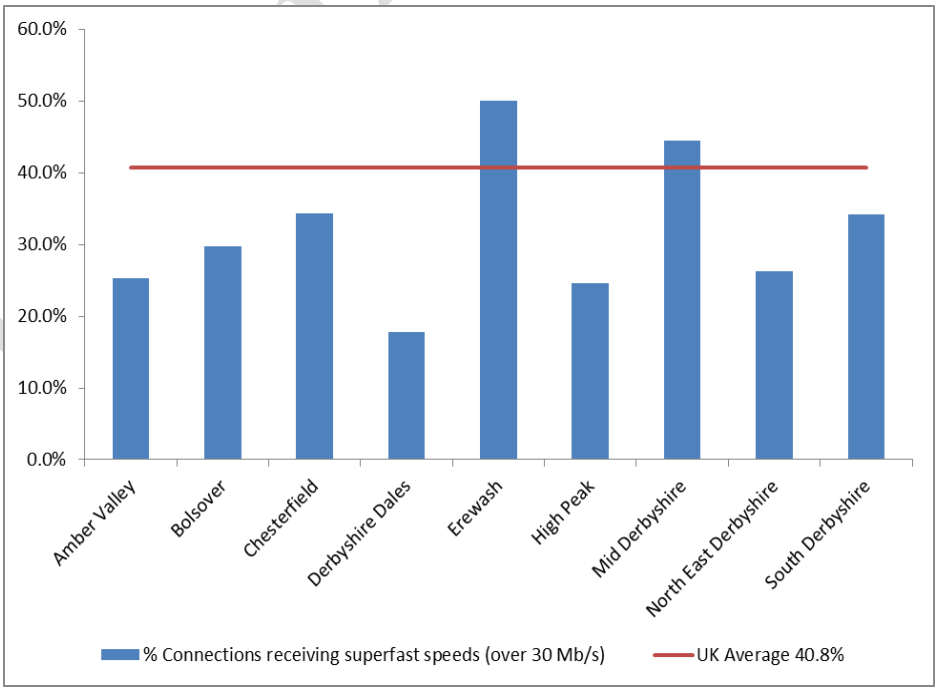


Figure 6. Percentage of connections receiving superfast speeds (over 30 Mb/s)



4. Evidence Gathering

4.1 Evidence from Digital Derbyshire

The working group held an initial meeting with Robert Rowan, Digital Derbyshire Programme Manager. Mr Rowan provided an overview of the Digital Derbyshire programme and made the following points,

- Digital Derbyshire programme consists of two separate contracts with BT.

- Contract 1 was signed in August 2013 and had an agreed completion date of September 2016. The initial target of upgrading broadband was 90% of areas by 2015, but later this was extended to 95% by 2017.

- At the time of the meeting (August 2016) 399 out of 425 cabinets have been fibre enabled under Contract 1 making fibre broadband available to approximately 91,500 premises in Derbyshire.

- The work has involved the installation of fibre optic lines between local telephone exchanges and street cabinets (green boxes). The existing copper wires running from the cabinets to the premises have not been replaced. Houses within a mile of the cabinet will benefit from an uplift in service, but if further away than a mile the potential benefit is diminished. For example a village 3 miles from a fibre enabled cabinet is unlikely to experience any discernible benefit. This scenario is referred to as a “long line issue”.

- Contract 2 is now underway. It aims to extend coverage to 98% of Derbyshire by 2018, when the contract ends. Work will include the upgrading of an additional 198 cabinets and also some fibre to the premises (FTTP) installations.

- Residents and businesses do not automatically benefit from the infrastructure being upgraded in their area. They have to sign-up and pay for a subscription service. It is an open access system meaning that consumers can use whichever provider they choose and are encouraged to shop around to find the best deal. To make it clear to residents that the upgraded service is not automatic the publicity material and posters on cabinets say “Fibre broadband is available to order”.

- Built into the contract with BT is a “Gain Share” component, based on the take up of the upgraded service. The greater the take up, the more money the Council can “claw back” and reassign to upgrade services in

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harder to reach areas. Consequently Digital Derbyshire undertakes public engagement to raise awareness when improved broadband services are available in an area. To do this the Digital Derbyshire team work with parish councils and county and district councillors to disseminate information.

- The take up of fibre services as at June 2016 was 31.5%, this is a significant improvement on the take up in April 2015 which was 10.77%. The improved take up has resulted from closer working relationships with district and parish councils.

- The highest take up is in South Derbyshire. It was also noted that in deprived communities there are affordability issues that limit take up.

- The national framework's guiding principle is to deliver value for money. This means that work has been focused in areas where there is a high concentration of premises.

- In phase 2 of the programme Digital Derbyshire is working with BT to modify the implementation plan. The intention is to give priority to rural areas with the greatest need. Residents in some rural areas may be reasonably well served by the existing broadband infrastructure (perhaps getting 10mb/sec) whereas other areas may have a very slow service and would benefit more by the service being upgraded in their area (and would be more likely to subscribe to a fibre broadband service).

- BT's original implementation model was based on 20% take up. Therefore to demonstrate to BT that there is a good demand for superfast broadband in rural areas Digital Derbyshire is carrying out demand registration work.

- It is unlikely that there will be any more government funding to support the roll out of superfast broadband. However if take up across Derbyshire continues to be good, gain share monies will be available to continue the roll out to harder to reach areas. The gain share arrangements will continue for 7 years from the end of the contract deployment and it is hoped that the money received will be sufficient to meet the target of 98% by 2023.

- The Digital Derbyshire team have produced a deployment map which shows existing and expected commercial superfast broadband coverage, areas where the Digital Derbyshire programme has been delivered and areas that are in progress. A revised deployment map for Contract 2 of the Digital Derbyshire programme is being prepared and it

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is anticipated that it will be available by the end of September 2016.

- The broadband service to a specific property can be checked by using the online BT wholesale Broadband Availability Checker ADSL Checker (There is a similar tool on the Virgin website). On entering the telephone number of a property the checker will display the supplying exchange and cabinet, and the broadband speed available. If “fibre to the cabinet” FTTC is listed as a product this means fibre broadband is available.

- In hard to reach rural areas where it's not possible to roll out fibre broadband, the Better Broadband Subsidy Scheme has been developed by the UK government to provide access to a subsidised broadband installation to homes and businesses that are unable to access a broadband service with a download speed of at least 2Mb per second and who will not benefit from the superfast broadband roll out. The subsidy provides support towards the cost of the equipment and installation of a satellite or wireless broadband service, up to the value of £350.

- There is a link on the Digital Derbyshire website where residents can apply for a voucher and there is a list of participating service providers.

- Larger business in rural locations sometimes choose to lease a dedicated line so that fibre runs directly to their premises. This is a commercial arrangement, usually with BT, and is an effective but expensive solution.

4.2 Evidence from BT

The review working group met with Paul Bimson, Regional Partnership Director and Rob Shakespeare, BT Contract Manager on 27 October 2016. During the meeting the following points were made:

- Superfast Broadband is delivering economic and social benefits to private households and SME’s across the UK. Furthermore, due to competition between Internet Service Providers (ISP’s) prices are continuing to fall.

- The capacity of fibre optic cable is vast and the current roll-out will “future-proof” Derbyshire’s infrastructure. It will enable faster speeds to be delivered in the future and accommodate technological advances that will facilitate new ways for the Council to deliver services.

- The main approach for supplying broadband under Contract 1 of the Digital Derbyshire Programme has been to run fibre cables to street

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cabinets. The final connection from the cabinet to each property is via the existing copper wires. This technology is referred to as Fibre to the Cabinet (FTTC) and allows speeds of up to 80Mbps.

- Contract 1 was completed ahead of schedule. The successful delivery of this scheme and the financial savings made was helped by good weather conditions. BT has also paid gain share monies early to the Digital Derbyshire programme as customer take up of superfast broadband (SFB) has increased to more than 30%.

- Contract 2 is likely to include a mixture of FTTC and Fibre to the Premise (FTTP) installations. FTTP is where a fibre connection runs from a distribution point directly to the property. Currently there is a limited number of suppliers offering FTTP services but it is anticipated that this will increase as the FTTP footprint expands. Consumers opting for FFTP will pay a connection fee as part of the initial set up costs. It should be noted that to be eligible for the standard FTTP connection fee the property must be within a certain distance from the distribution point.

- In accordance with State Aid regulations, the Digital Derbyshire team has undertaken consultation to ascertain commercial rollout plans in Derbyshire. The team has also liaised with District and Borough Councils to identify priority areas for the delivery of SFB under phase 3 of the project. It is anticipated that early in 2017 it will be clear what communities will (and will not be) included in the roll out and BT Openreach will model relevant solutions.

- Some properties are so remote that the provision of fibre broadband will not match the value for money criteria and will prove to be prohibitively expensive. In these circumstances mobile technology may provide a solution. BT now owns EE which has the government contract to change the current radio technology that emergency services use, to 4G and ultimately to 5G. Therefore there is an extensive programme currently underway to increase 4G coverage.

- At the present time 20Mbs is considered to be a good speed to meet the needs of most families (this allows multiple users to access on-demand TV, stream music, browse the internet etc.). BT is continuing to invest in the development of new technologies to further increase broadband speeds to meet the growing demand for digital technologies.

- New technology has been developed to increase the speeds that can be achieved over copper wire. “G.fast” and “XG.fast” are technologies that can be installed in fibre enabled street cabinets. G.fast will deliver

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download speeds of up to 500Mbps (and approximately 50Mbps upload) and is effective over distances of up to 350m. “XG.fast” can achieve speeds of up to 5.6GB but is only effective over short distances of up to 35metres. Therefore these technologies will not solve the long line issues experienced by rural communities. The best approach continues to be extending fibre cable as far as possible so that rural communities will then also be able to benefit from these new technologies.

- In the immediate future there are no plans to replace copper wires. The approach will be to have a mix of technologies. Fibre to the premise for the majority of new builds and G.fast electronics (or similar) to increase the speeds achieved over the existing copper wires.

- BT have a license obligation to provide basic telephony services (that allows access to the 999 emergency services that is independently powered from the main electricity network) to any new property. However in terms of access to faster broadband the onus is on the developer to make provision if they decide to do so. BT has prepared an information pack to guide developers through the process.

- Planning regulations do not impose conditions relating to access to high speed broadband. Within the last 12 months, however, BT Openreach agreed to provide free of charge FTTP (directly from the exchange) if the development consisted of more than 250 homes. More recently this threshold has been reduced to 30 properties. Where there are less than 30 homes there will generally be a cost to the developer.

- BT offers other products that are not part of the Digital Derbyshire scheme. Property owners and businesses that are a long distance from a cabinet or distribution point may choose to pay for their own FTTP installation known as 'Fibre on Demand' (FOD). The cost for the FOD product varies depending on the terrain, distance and circumstances associated with each property. Therefore each property is assessed individually and an estimate provided. The pricing structure includes a fixed connection charge, and annual rental charge and a distance based charge for the civil engineering work. Once the FTTP technology is in place the consumer can then choose the internet service provider from which they would like to purchase their broadband service from.

- In the last 6 months BT has set up a Community Fibre Partnership (CFP) programme. This is where a community can choose to pay the difference between the cost of the commercial business case and the total cost of delivering broadband to that community. BT Openreach has set up a website where communities can register their interest and

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provide details of the target area (households and telephone numbers). BT will then model a solution and provide an estimate of how much it would cost the community. It is anticipated that communities might fund the gap in a number of ways including crowd funding or revenue from local income generating community projects. There is BT grant funding available (of up to £20,000) if the community has a school that has a broadband speed of less than 20Mbps. Furthermore the Department of Culture Media and Sport voucher scheme (available to residents to install satellite or wireless broadband if their download speed is less than 2Mbps) has been extended to allow it to be used for fibre infrastructure. Therefore eligible households can group together and combine their vouchers (worth £350 each). "Self-dig" schemes allow rural communities and individual property owners to undertake some of the groundwork themselves in preparation for FOD installations or community fibre partnerships.

- In response to a series of questions Members on the working group were advised that:

    - If an area engages in a CFP, any funding that had been allocated to the area as part of the Digital Derbyshire programme would be reallocated.
    - A community might consider a CFP to gain certainty and control over the delivery of broadband to their area (particularly if they feel they maybe in the 2% that will not be reached by the Digital Derbyshire programme).
    - BT Openreach have the capacity to meet the current demand for CFP schemes alongside its commitment to deliver contract 2 of the Digital Derbyshire rollout and its commercial rollout.
    - The infrastructure supporting a CFP will go live within 12 months of the community accepting the contract and paying 50% of the communities total contribution.

3.3 Consultation with Parish Councils

The Chair of the working group emailed all of the Parish Councils in Derbyshire (approximately 200 councils) inviting them to contribute to the review of broadband access in Derbyshire. The email provided some background to the Digital Derbyshire programme and explained that owing to the scale of the countywide project the broadband infrastructure was being upgraded in stages.

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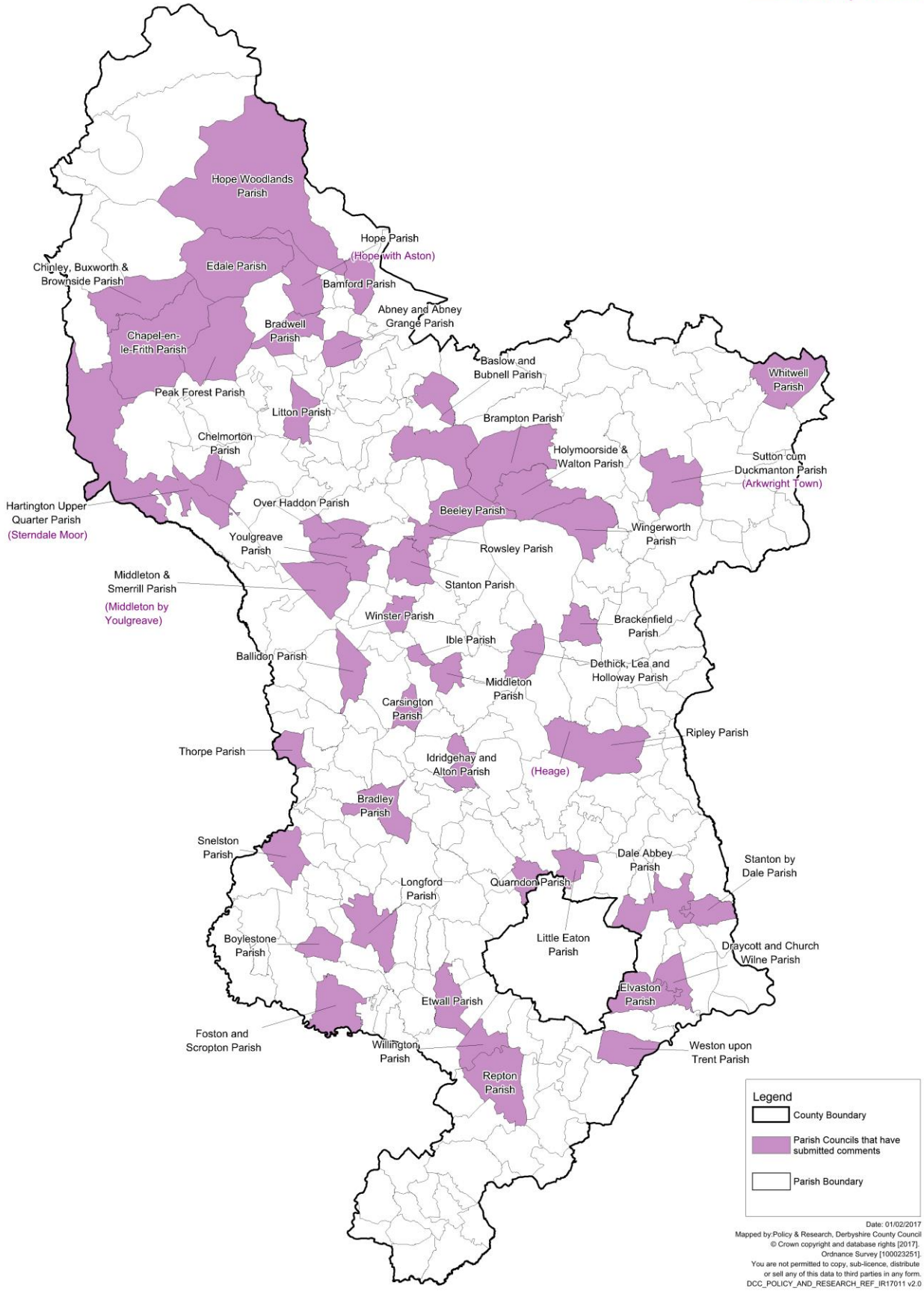
Figure 7 - Review of broadband access in Derbyshire - Map of Parish councils that have submitted comments Dec 2016/Jan2017



In total 50 submissions were received. Figure 7 shows the geographical distribution of the responses. It is important to note that although the whole of the parish is highlighted if a council made a submission generally the comments made related to only a small area within the parish.

The comments received were grouped into the following themes.

Slow broadband speed / inconsistent coverage.

The majority of submissions (92%) stated that broadband speeds were slow in some areas within the parish.

There were many comments expressing frustration and a sense that their area had been forgotten or "written off".

Lack of up-to-date information or inconsistent information.

Approximately a third of all responses (34%) said that it was difficult to obtain up-to-date and accurate information about specific plans to upgrade the broadband infrastructure in their area.

There was criticism about the uncertainty being experience by a number of communities. These communities do not know when (if ever) fibre broadband will be available and without this information parish councils are unable to advise residents on the best course of action during the interim period. Consequently there were many calls for indicative timeframes to be provided. Conversely some communities reported that service deadlines had been given but were missed.

There were comments that the Digital Derbyshire website had been found to be inaccurate and that the postcode-based checker was misleading and unhelpful. Furthermore some submissions reported that information provided by BT contradicted the information provided by Digital Derbyshire.

The impact of slow broadband speeds.

There were a range of examples of how slow broadband speeds are affecting community and business activities. Nine of the responses (18%) described negative impacts of slow broadband speeds.

Some of the examples provided were as follows:
- The Department for Environment, Food and Rural Affairs (DEFRA) require farmers to submit information on line and , by the very nature of the industry, farms are located in rural and often remote areas where fibre broadband may not be available.
- The activities in business training events and community based workshops are restricted by slow internet speeds.
- Slow and unreliable broadband can make an area less attractive to businesses and can have a negative impact on house prices.
- Businesses providing visitor accommodation or other tourism related services are put at a disadvantage if they do not have reliable and sufficiently fast broadband speeds to meet the expectations of tourists
-Some residents who would like to work from home are unable to as the their broadband is to slow or unreliable.

Concerns regarding alternative technology solutions.

Approximately 12% of submissions raised concerns about the current alternatives to fibre broadband.

A frequent comment was that wireless and particularly satellite solutions are more expensive and residents are unable to benefit from “bundles” and offers available to people who have access to fibre broadband.

Some parish councils reported that in certain areas within the parish the broadband speed is unsatisfactory but is not slow enough to be eligible for the Better Broadband voucher scheme.

Residents have reported frustration that satellite technology can be affected by weather conditions and that radio technology is not available to all properties as a line of sight is required between the transmitter and the receiver.

Community Fibre Scheme

Five Parish Councils mentioned Community Fibre Schemes. Some expressed alarm at the suggestion that communities have to resort to self-funding basic communication infrastructure. Others alluded to the fact that a great deal of research and commitment from individuals in the community is required to develop and submit a proposal for a Community Fibre Scheme before BT will provide a quote.

One parish council gave the example of being quoted £175,000 for a community fibre project covering 2.3 miles.

Another parish council said that they had been "Thwarted" because the time and energy they had devoted to researching a Community Fibre Scheme proved futile because commercial rollout plans had been rescheduled.

Short-termism

The delivery model was questioned in two of the submissions. In particular concerns were expressed that the use of existing copper wires (from street cabinets to properties) was not an approach that was future proofing the infrastructure.

Landline issues and poor mobile phone reception

Fourteen submissions included comments about general telecommunications issues. These comments were useful in providing a complete picture of the communication difficulties and frustrations experienced by some communities. However poor mobile reception and poor quality landline calls are outside the remit of the Digital Derbyshire Programme.

Satisfied with approach

Three submissions were supportive of the approach. For example one of the comments received stated that: "Those residents that have benefitted from the Digital Derbyshire scheme are delighted with fibre broadband"

The submissions were shared with Digital Derbyshire and a meeting was held to consider the comments. During the discussion the following responses were made.

Digital Derbyshire Remit

The remit of the Digital Derbyshire project is to deliver fibre enabled infrastructure to areas of identified need where there are no commercial roll-out plans to upgrade the infrastructure. In those areas of the County where the infrastructure is being upgraded purely on a commercial basis, Digital Derbyshire has no involvement in the delivery of fibre broadband.

Infrastructure from the street cabinet to the premise

BT is responsible for the infrastructure from the street cabinet to the premise. Therefore problems relating to bandwidth and performance are not issues that Digital Derbyshire has direct control over. In some circumstances the copper wire leading from the cabinet to individual properties is in poor condition, or poorly maintained vegetation may encroach on overhead wires and this can impact on the service that the customer receives.

Slow broadband speed / inconsistent coverage

Value for money is the guiding principle for the delivery of the Digital Derbyshire Programme. Therefore decisions about which areas are next in-line to be upgraded are based on the following factors:
- The area must not be part of a commercial rollout programme
- The anticipated up-take (based on the number of properties served by the infrastructure and the response to pre-registration investigations conducted by the Digital Derbyshire team)
- More latterly the current broadband speed has been taken into account when prioritising areas to be upgraded, this is because uptake tends to be higher in areas where existing broadband speeds are very slow. In areas where the existing speeds are 10Mbps the uptake may not meet the 20% threshold that would lead to money being returned through the gain share agreement.

Lack of up-to-date information or inconsistent information

The Digital Derbyshire team explained that the material published on the website about the availability of fibre broadband is based on data provided by BT (that is contained in a file referred to as the C3 report). It shows all premises in the previous quarter that have access to fibre broadband. There is however a delay in this information being available, for example

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data for June to September 2016 was not available until Jan 2017. Consequently there are times when this information on the Digital Derbyshire website is not comprehensively up-to-date.

During discussions with Members of the working group, the Digital Derbyshire team demonstrated good knowledge of the circumstances within each parish. They were familiar with the existing infrastructure in each location and were aware of the areas experiencing slow broadband speeds. It was also clear that conversations had taken place with the majority of parish councils that had submitted comments. However, given the volume of submissions from parish councils and the specific comments describing difficulties in obtaining up-to-date information it would appear that that there is a mismatch between the frequency of communication that has taken place and the expectations of many communities in Derbyshire.

Landline issues and poor mobile phone reception

Crackling on the line may be caused by faulty or corroded wiring, moisture on cables or electrical interference. These are issues for BT to resolve and are outside the remit of Digital Derbyshire.

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Appendix 2

Access to Broadband in Derbyshire

Update 26 June 2017

Robert Rowan (Digital Derbyshire Programme Manager)
Kerry Bailey (Digital Derbyshire Engagement Officer)

Digital Derbyshire has been asked to provide an update as to how the fibre broadband programme is progressing throughout the county. This update should be considered alongside the interim report of the scrutiny review of access to broadband in Derbyshire (dated February 2017).

As of 26 June 2017, the latest position is as follows:

Delivery

- Digital Derbyshire programme consists of two separate contracts and delivery phases with contract 1 (phase 1) targeted to deliver fibre broadband to 85,904 premises of which 81,610 will be able to receive a download speed in excess of 24Mbps. Contract 2 (phase 2) targets are to deliver an additional 17,182 premises of which 12,776 will be able to receive a download speed in excess of 24Mbps by 31 December 2018.

- Delivery of phase 1 completed in October 2016 and has provided fibre broadband to 91,606 premises through 426 new fibre enabled cabinets. Of the 91,606 fibre enabled premises, 81,867 are able to receive a download speed in excess of 24Mbps.

- Delivery of phase 2 commenced in September 2016 and has to date delivered fibre broadband to over 4,000 premises thereby taking the combined total across both phases to over 95,000 premises now able to receive fibre services.

- Phase 2 will include the upgrade of an additional 199 cabinets, with a significant amount of fibre to the premises (FTTP) installations. FTTP installations take longer to deploy as they are more technically challenging than fibre to the cabinet (FTTC).

Gain Share and Take-up

- Built into both contracts with BT is a “Gain Share” component, based on the take up of the upgraded service. The greater the take up, the more money the Council can “claw back” and reassign to upgrade services in harder to reach areas. Consequently Digital Derbyshire undertakes public engagement to raise awareness when improved broadband services are available in an area. To do this the Digital Derbyshire team work with parish councils, county and district councillors and MPs to disseminate information.

- The implementation model within the first contract is based on 20% take up. The gain share arrangements will continue for 7 years from the end of the contract deployment with regular review periods at year 2, 4, 6 and 7 which will then determine the amount of gain share available to the Council. Whilst officially the first review period is not scheduled until October 2018, BT has provided an early gain share offer of £2.41m to the Council. This gain share can be reinvested in fibre broadband now, rather than in 2019 and beyond.

- The take up of fibre services as at April 2017 was 46.74%; this is a significant improvement on the take up in April 2015 which was 10.77%. The improved take up has resulted from closer working relationships with district, town and parish councils, as well as MPs.

- The highest take up remains in South Derbyshire. Whilst it has previously been noted that in deprived communities there are affordability issues that limit take up, recent competition between Internet Service Provider's (ISP's) means that often fibre services can cost the same or even less as standard ADSL services. It is up to the customer to shop around for the best deal that meets their requirements.

- Both contracts follow the BDUK's national framework's guiding principle, which is to deliver value for money. This means that work has been focused in areas where there is a high concentration of premises, which should in theory result in a higher take up of fibre services.

Underspend from Contract 1

- Phase 1 of the Digital Derbyshire programme has been delivered cheaper than originally forecast. Therefore as a result of this, underspend (circa £6m) from phase 1 will be added to the early gain share offer and reinvested throughout the county.

- In order to reinvest this funding, Digital Derbyshire undertook a public consultation to ensure the project area scope has not changed, and that public funding was not duplicating fibre services being deployed by other commercial providers. The exercise was undertaken in September 2016, with the results included within the projects revised intervention area and subsequently supplied to BT for modelling. The outputs of this modelling are expected by the end of July 2017.

- Once the outputs of the modelling exercise have been agreed by the Council, BDUK and BT, additional premises and associated costs and timescales will be added to the current contract 2. In terms of delivery, this additional work will be referred to as "Phase 3".

Mapping

- The Digital Derbyshire programme is mapped at a postcode level. Unfortunately, due to historical, complex and technical provision of existing BT infrastructure, it is not always possible for all premises in a postcode to be served collectively from the same infrastructure. In fact, the majority of postcodes are served by a mixture of multiple cabinets and/or directly from an exchange over existing short or long copper/aluminium lines connecting these premises.

- Given these technical challenges, it is extremely difficult to portray an accurate map depicting the projects intervention area and delivery phases. Digital Derbyshire recognise the issues and frustrations these maps can cause the public, however the

team is continually exploring options to make the maps as clear and transparent as possible.

- The Digital Derbyshire website has recently been updated to include a more detailed map and postcode checker. Additional explanations of the mapping and postcode classifications have also be updated. It is envisaged that a more detailed interactive map will be available in the coming months, which give further clarity in terms of coverage.

- Once the outputs from the underspend and gain share modelling are known, Digital Derbyshire will produce a new map and supporting information which will provide further clarity regarding the phase 3 delivery programme.

Better Broadband Subsidy Scheme

- In hard to reach rural areas where it's not possible to roll out fibre broadband, the Better Broadband Subsidy Scheme has been developed by the UK government to provide access to a subsidised broadband installation to homes and businesses that are unable to access a broadband service with a download speed of at least 2Mb per second and who will not benefit from the superfast broadband roll out. The subsidy provides support towards the cost of the equipment and installation of a satellite or wireless broadband service, up to the value of £350.

- The scheme has seen significant increases in approved grants since the introduction of wireless operators to the scheme in June 2016. The scheme includes six local suppliers who are either physically located, or operating in Derbyshire. As of 26 June 2017, over 540 grant codes have been issued with 217 claimed through the scheme.

Additional queries

In addition to the updates above, please see response below to queries that have been raised through the consultation with Parish Councils (section 3.3) within the draft version of the report.

Slow Broadband speed/inconsistent coverage

- When multiple providers are delivering solutions, it may well be the case that there is inconsistent coverage in some areas.
- Most areas are served by multiple infrastructure which makes it difficult to obtain 100% coverage to all areas. The Digital Derbyshire programme is installing fibre cabling to either the green roadside telephone cabinet (FTTC), or to the telephone pole or underground junction box (FTTP). The connection and quality of the cable between the cabinet, pole or underground box to the property is the responsibility of Openreach. Openreach install and maintain this infrastructure. Openreach are regulated by Ofcom, so we recommend communities contact Ofcom should they continue to experience issues.

- The framework is based on VfM, hence why some areas may not be included in programme yet. Hopefully the project can pick them up in phase 3. Also, some areas may be outside the remit of Digital Derbyshire as they are covered by commercial operators i.e. Virgin Media, BT etc.

Lack of up-to date information

- The website has been updated since the initial review. However, it needs to be stressed that the website updates are dependent on the accuracy of the C3 data from BT, which contractually is provided at least 3 months in arrears.
- Service deadlines have been missed mainly due to the engineering challenges experienced by Openreach and their sub-contractors.
- It is very difficult for Digital Derbyshire to fully comment on when an area will get fibre, as the infrastructure doesn't neatly fit in a geographic area.
- The emphasis from the strategic board of Digital Derbyshire is/was to focus on areas just about to receive fibre to ensure a good take up rate. This has worked well.

The impact of slow broadband speeds

- As per slow broadband speed/inconsistent coverage above. These are subjective comments.

Concerns regarding alternative technology solutions

- This is a central government voucher scheme, therefore, out of the remit of Digital Derbyshire. Packages and prices are dropping all the time and scheme has thresholds which suppliers must adhere to.

Community Fibre Scheme

- This is one scheme which is part of the Better Broadband Subsidy Scheme. Whilst Digital Derbyshire is happy to receive information, the contract for anything in the BBSS scheme is with the client (s) and the agreed provider. A suggestion would be for a community to escalate their concerns to their local MP who in turn can raise this with BDUK.

Short – termism

- Digital Derbyshire works to a nationally agreed framework with commitment to achieve download speed of 24Mbps. As per slow broadband speed/inconsistent coverage above, Digital Derbyshire is not responsible for wiring between cabinet/pole and property. This is Openreach's responsibility. A suggestion is for the local MP or elected DCC member(s) to discuss at a governmental level.

Landline issues and poor mobile phone reception

- Landline and mobile receptions are outside the remit of the Digital Derbyshire project.

Satisfied with the approach

- As a project we do not usually hear from satisfied customers. The recent take up figures are extremely encouraging, which has enabled us to draw down £2.41m in 'gain share' monies to use to extend the fibre footprint to areas that aren't fibre enabled.