Broadband Access in NI – Rural/Urban Comparison – January 2021

Now more than ever, a stable broadband connection has become increasingly essential for business purposes, facilitating home and remote working, communication including video calling and apps like Zoom and WebEx, as well as leisure activities like high-definition video streaming and online gaming. With our usual outdoor activities and social interaction curtailed due to Covid-19, there has never been a greater appetite for fast, stable broadband connections to support our work and home lives.

Barriers to Broadband Access in NI

Historically, there has been a disparity across the UK between the availability of reliable broadband connections in rural and urban areas, primarily due to the 'increased cost of deploying communications infrastructure to serve areas where there are few customers or where the costs of building infrastructure are higher' (Ofcom Connected Nations Report, 2018).

Access to these services in NI has an additional obstacle. NI has longer average line lengths between enabled properties and the closest fibre cabinet, as a result of how its rural population is distributed. As the broadband signal will degrade over longer distances, this inevitably results in slower than average data transfer speeds to rural households and businesses.

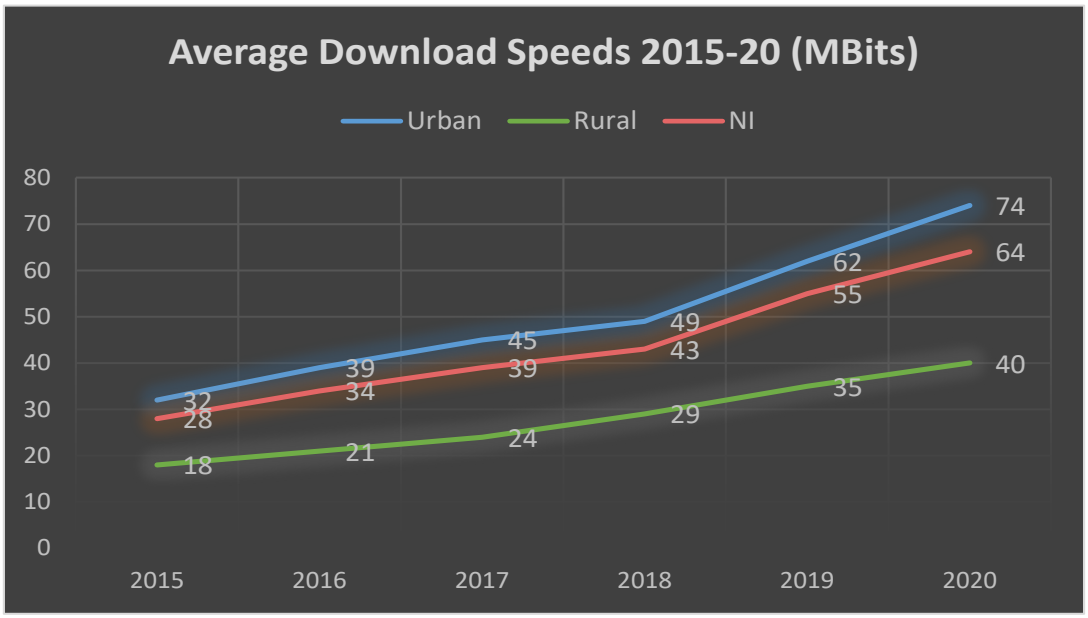
However, Northern Ireland's existing networks are currently being upgraded and new fixed infrastructure is being built. Increased competition between providers including Virgin Media, OpenReach and Fibrus has resulted in NI having the best full-fibre internet coverage of the four devolved administrations (56%) compared to England (16%), Scotland (17%) and Wales (19%).

Rural/Urban Analysis

This bulletin outlines some key year-on-year statistics from Ofcom's 'Connected Nations Northern Ireland' series of reports, highlighting trends and disparities in broadband availability in rural and urban settings, and NI as a whole.

Download Speeds and Data Usage

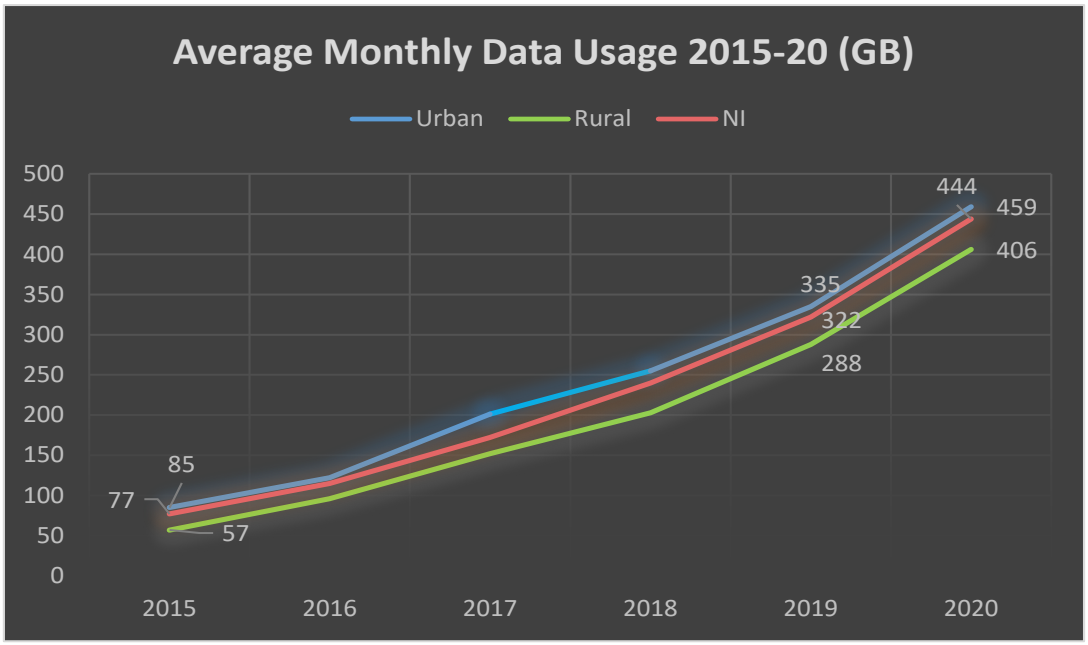
Figure 1: Average Download Speeds, Urban/NI/Rural comparison 2015-20



Source: Ofcom

Average download speeds had increased at roughly the same pace in both rural and urban settings until 2018, with the gap increasing in 2019 and 2020. Rural speeds still lag significantly behind urban speeds in 2020 at 40Mbps, compared with 74 Mbps for urban areas.

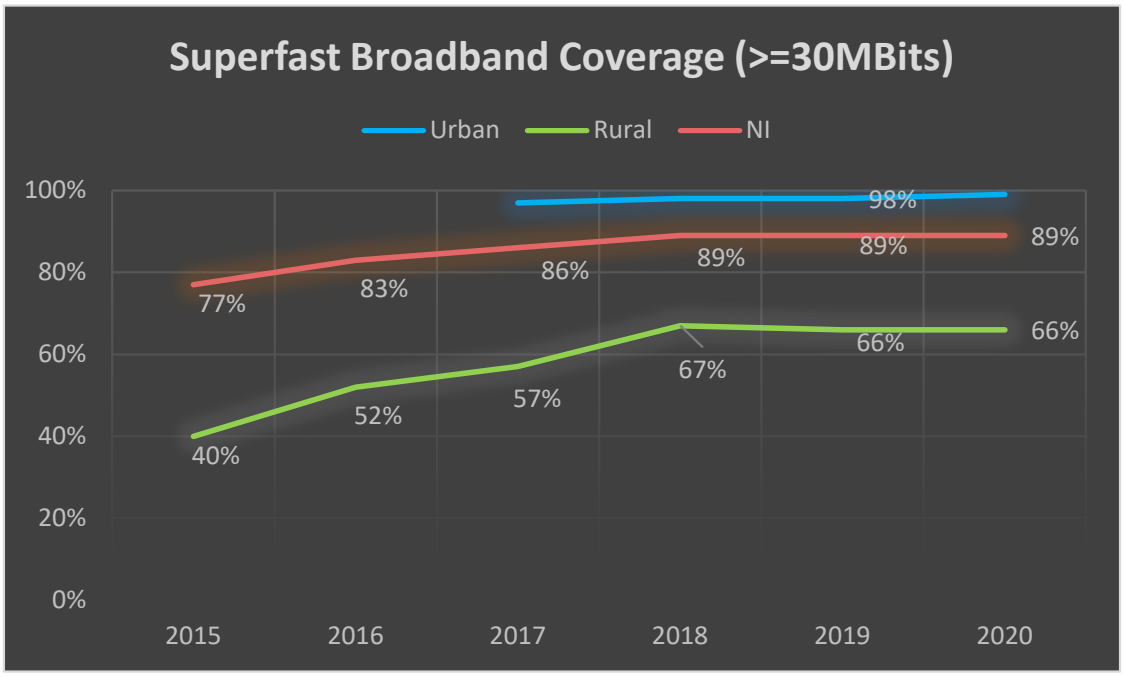
Figure 2: Average Monthly Data Usage, Urban/NI/Rural comparison 2015-20



Source: Ofcom

Monthly broadband data usage had increased dramatically in both rural and urban settings, by almost a factor of six for the latter, between 2015 and 2019, but usage for both increased at an even greater rate in 2020, doubtless influenced by the Covid-19 pandemic. In 2020, the gap in average data usage between urban and rural areas is much less pronounced, underlining the increasing 'essential' nature of a broadband connection regardless of location.

Figure 3: "Superfast" Broadband Coverage, Urban/NI/Rural comparison 2015-20

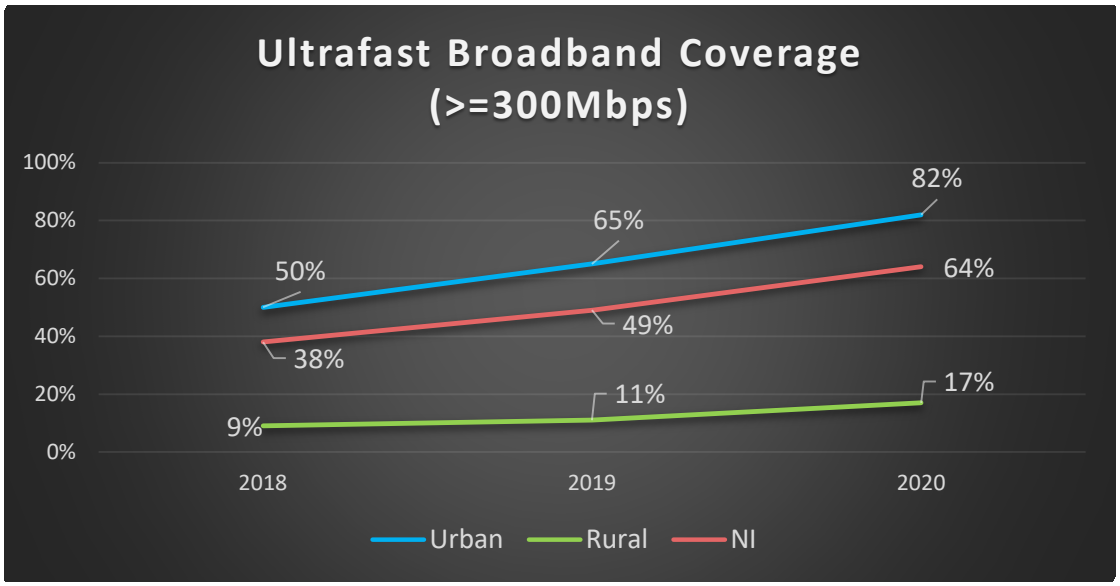


*"Urban" data not available for 2015-16

Source: Ofcom

In 2020, approximately two thirds of broadband-enabled rural premises were able to achieve 'superfast' broadband speeds of 30Mbits or more, a substantial increase from 40% in 2015. 'Superfast' access in urban areas increased to a lesser extent over the period, although more than three quarters (77%) of urban properties already had access at the beginning of the period. There was no change in the figures from 2019 to 2020.

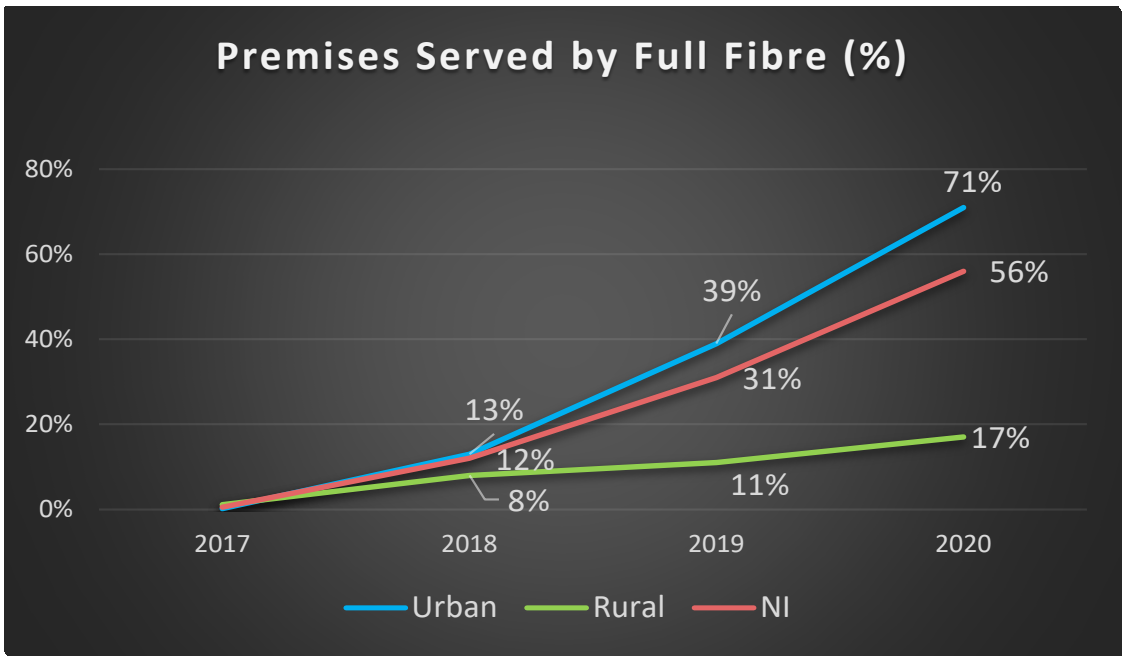
Figure 4: "Ultrafast" Broadband Coverage (% of premises), Urban/NI/Rural comparison 2018-20



Source: Ofcom

By 2020, more than two thirds (64%) of NI broadband-enabled premises had access to speeds of 300MBits or more – an increase of 15% from 2019. The rural/urban comparison reveals a stark disparity – 82% of premises in urban areas had access to speeds of 300 Mbps or higher, while just 17% of rural broadband customers could achieve 'ultrafast' speeds, although this was an increase on the 2019 figure (11%).

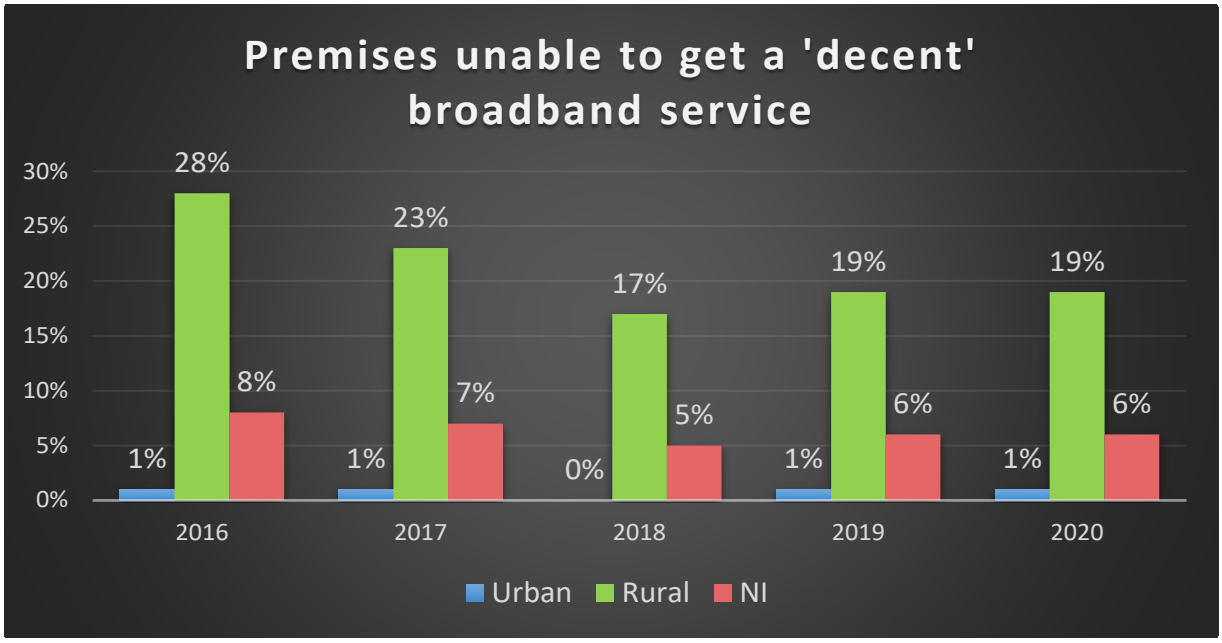
Figure 5: Premises served by 'Full Fibre' broadband (%), Urban/Rural/NI comparison 2017-20



Source: Ofcom

The availability of full-fibre broadband services has increased markedly over the past 2 years, and by 25% from 2019 to 2020. More than half (56%) of NI premises now have access to a full fibre connection, compared with just 1% as recently as 2017. Urban premises were the most significant beneficiaries of this emerging technology (71% of urban premises have access in 2019, a dramatic increase from 39% in 2019), with rural premises seeing greater access but on a much slower scale (17% have access in 2020).

Figure 6: Premises unable to obtain a 'decent' broadband service, Urban/Rural/NI comparison 2016-20*



*defined as minimum download speed of 10 Mbps, and upload speed of at least 1Mbps

Source: Ofcom

One of the main difficulties for broadband users in rural areas, is achieving high enough speeds for basic use. Figure 6 demonstrates the trend of decline from 2016 to 2020 in the proportion of properties unable to achieve a minimum acceptable speed in rural areas. Just 19% of rural properties were unable to achieve a 10MBps download speed, compared with 28% in 2016, with the figures remaining unchanged from 2019 to 2020.

Digital Connectivity in Northern Ireland – the Future

Openreach expects its full fibre network to reach 60% of premises in NI by March 2021 while both Virgin Media and Fibrus continue to expand their full fibre provision.

The proportion of NI premises unable to receive a 'superfast' service (>=30 Mbit/s) remains high (11%). The Northern Ireland Executive, in partnership with Ofcom, has committed to addressing this disparity, in order to improve access to fast, reliable broadband in rural areas, through Outcome 11 in the draft Programme for Government and the Project Stratum initiative currently being undertaken by the Department for the Economy (DfE). The project is funded by £150m from the UK Government and £15m from the Department for Agriculture, Environment and Rural Affairs (DAERA).

DfE proposes to connect more than 76,000 premises with full fibre broadband capable of delivering 1Gbit/s download speeds. The contract was awarded to Fibrus in November 2020 with work starting immediately and running until March 2024.