

Broadband Infrastructure delivery in Darlington 2012-2020



Digital Durham



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COMBINED
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Department
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Media & Sport



DARLINGTON
BOROUGH COUNCIL

Broadband Infrastructure delivery in Darlington 2012-2020

Brief introduction:

1. Broadband and Policies
2. BDUK and Public Funding
3. Darlington Rollout (Public / Rural / Commercial)
4. The future Investments

1) Broadband and Policies

Essential jargon buster:

4U	(4 th Utility)
BB	(Broadband)
mbsec	(megabits per second) ≠ (Megabyte + size)
Superfast	(24mbsec UK / 30mbsec EU)
Ultrafast	(Speeds over 100mbsec)
5G	(5 th Generation Mobile Broadband)
ISP	(Internet Service Provider)
NGA	(Next Generation Access)
FTTC	(Fibre to the Cabinet)
FTTP	(Fibre to the Premises)

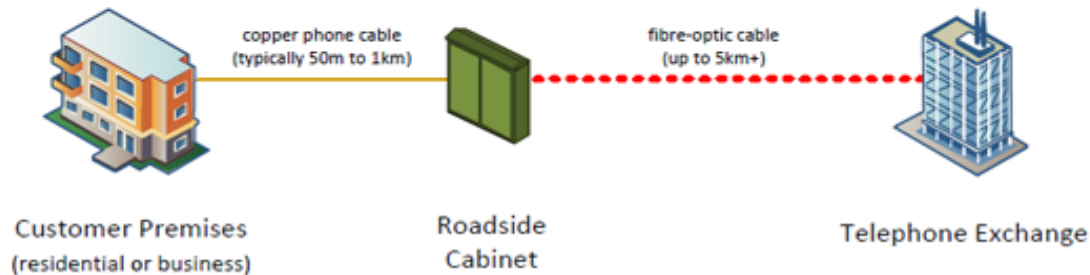
Ofcom: 2014

1) Broadband and Policies

Fibre-the-cabinet (FTTC)

(also known as 'fibre-to-the-kerb')

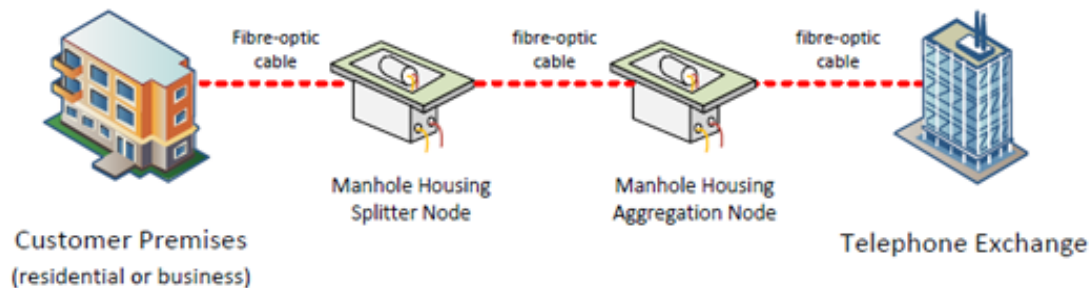
FTTC broadband means that most of the 'local loop' (the phone line from your premises to the telephone exchange) is using fibre-optic cable, with the last few metres being copper. This means you get faster speeds as the short copper line can run VDSL rather than ADSL technology.



Fibre-the-home (FTTH)

(also known as 'fibre-to-the-premises' / FTTP)

FTTH or FTTP means that your broadband connection is delivered as a fibre-optic service all the way from your home to the telephone exchange. Fibre-optic cabling can deliver the fastest speeds.



1) Broadband and Policies

Policy

DIGITAL Europe- Europe 2020 (2007)



Digital Britain – (January 2009)



Implementation

“Broadband for all” Budget 2010 (6bn - 90% Superfast 2017)

“Superfast Broadband Programme” (Broadband tax / 530m BDUK)

1) Broadband and Policies

(continued)

Superfast Extension Programme (SEP) £250m (2014)

Universal Service Obligation (2015) 100% access over 10mbsec by 2020

EU Digital Objectives 2025 (2016)

- 100% access 100mbsec 50% access business 1gbsec 2025)
- WIFI 4EU (free Wifi for all citizens)
- 5G coverage

2016 Autumn Budget

- £0.7bn 5G and FTTP
- £400m Phase 3 Superfast by 2020 (Digital Infrastructure Fund)

2) BDUK and Public Funding

Broadband Delivery UK (BDUK)

<https://www.gov.uk/guidance/broadband-delivery-uk>

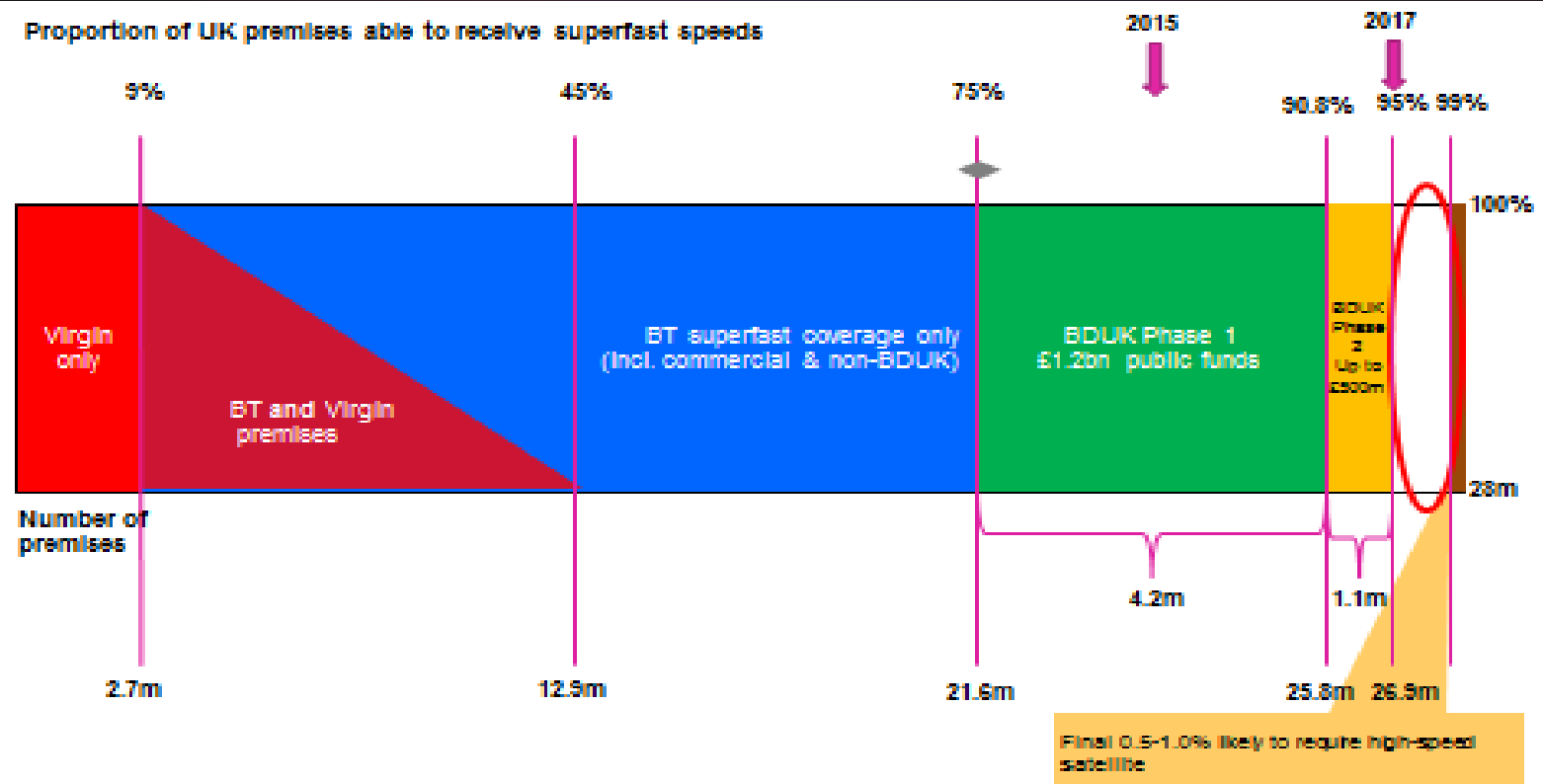
Targets:

1. Superfast broadband coverage to 90% of UK by early 2016
2. Universal 2mbps standard broadband access by end of 2015
3. Superfast broadband to 95% of UK by 2017
4. Developing options to extend superfast broadband coverage beyond 95% from 2018
5. Provided over 90,000 connection vouchers to SMEs

BDUK Aims

Extending coverage

Proportion of UK premises able to receive superfast speeds



2) BDUK and Public Funding

Public Funding:

6bn (2010) – 3.2bn (2012)

Involvement of Local Authorities

BDUK offer of budget based on need / connectivity for each Local Authority

Local Broadband Strategies

Local Broadband Delivery Programmes

3) Darlington Rollout

Public:

Tees Valley Broadband Plan (TVU)

Aim: providing a detailed assessment of where the public sector might be best placed to intervene in order to extend superfast fibre broadband to all premises in the sub-region.

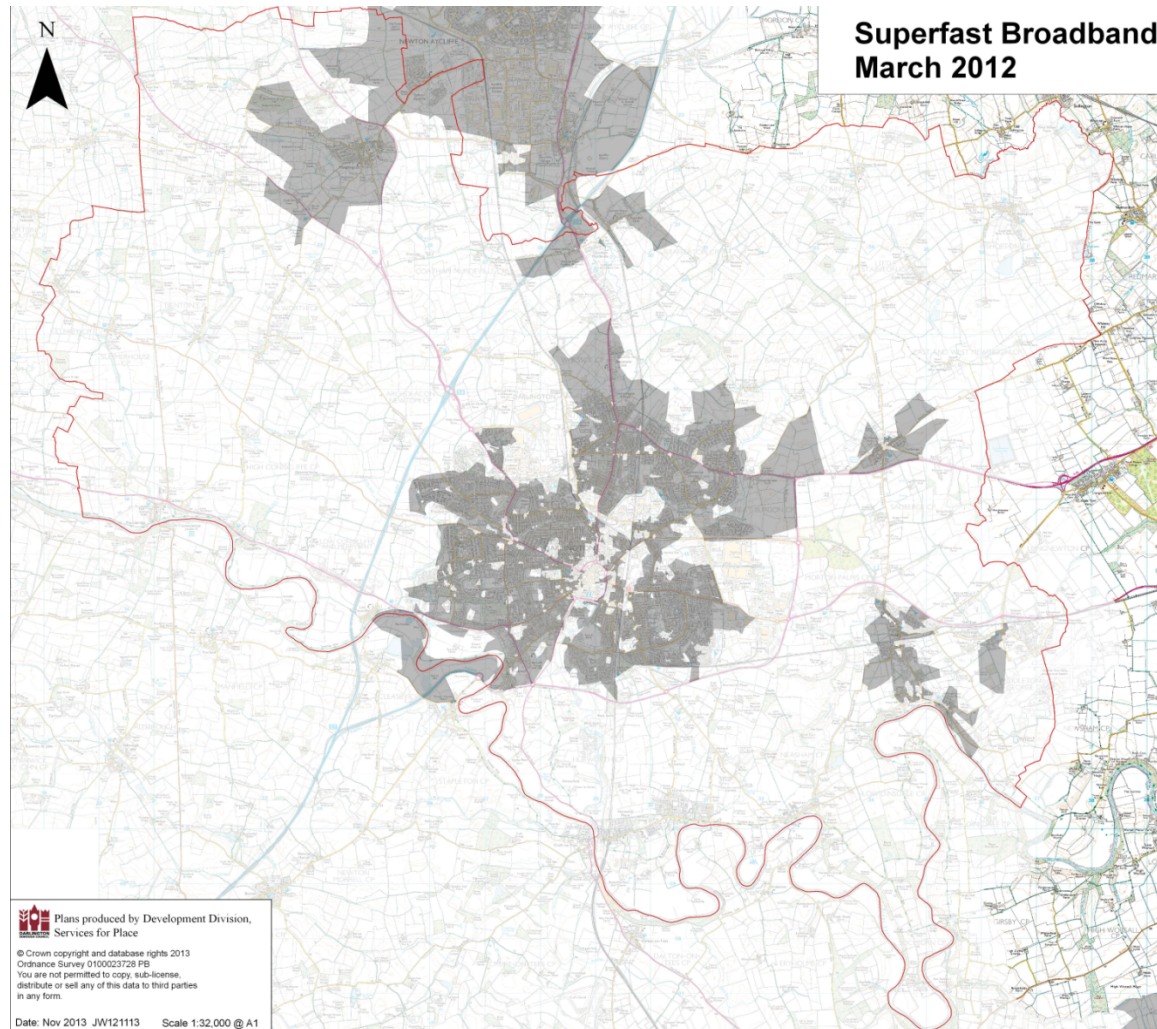
BDUK allocation £770k (for DBC £160k)

Digital Durham Programme



BT Openreach (Provider)

Darlington coverage 2012



3) Darlington Rollout

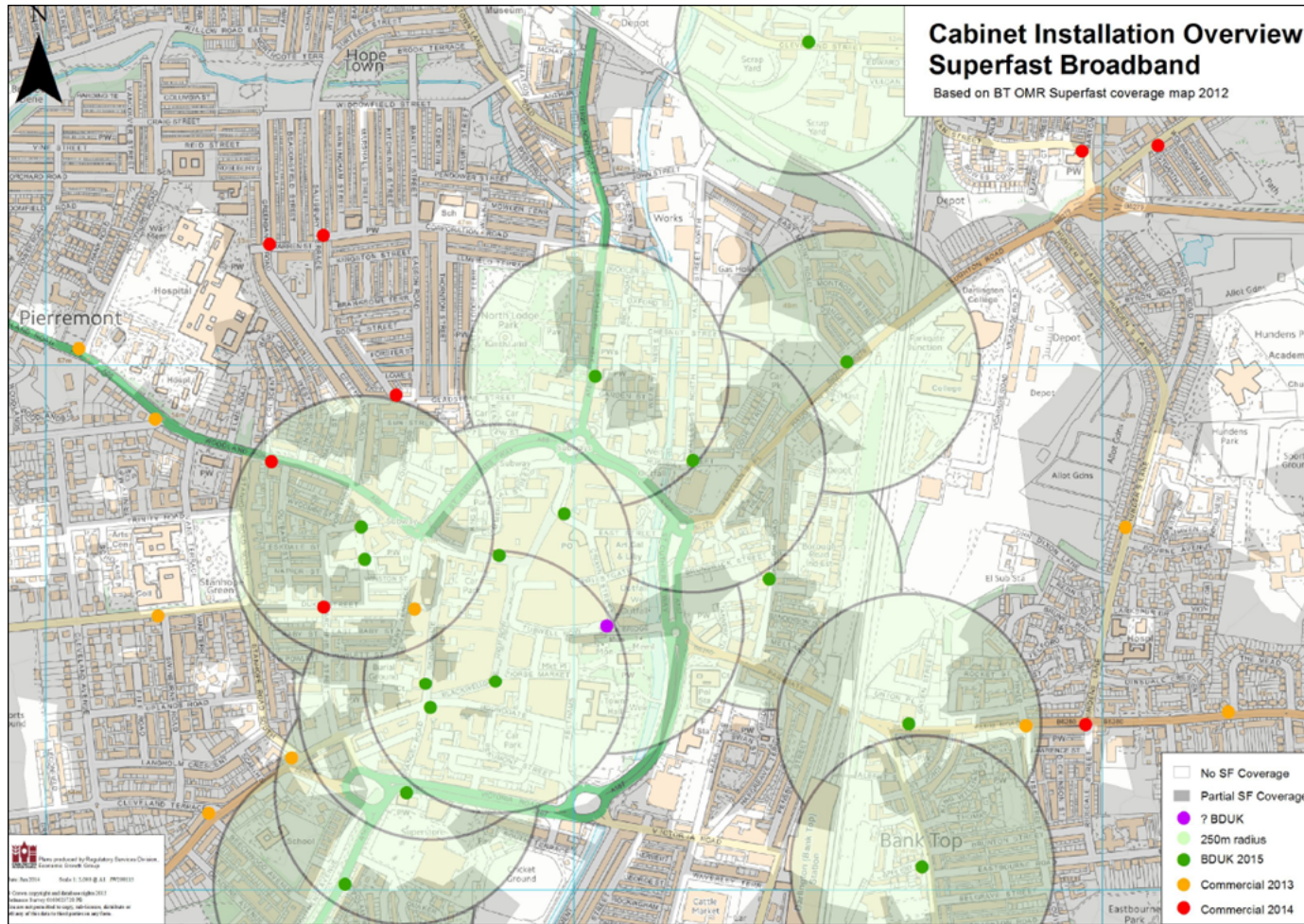
Phase 1:  Digital Durham Programme 2014-2016

Targets: Town Centre / Enterprise Zones

19 cabinets in Darlington TC / 4 Rural (Mar 2016)
(2k premises)

89% Superfast coverage 2012 - 93.5 % Mar 2017

Darlington Town Centre coverage



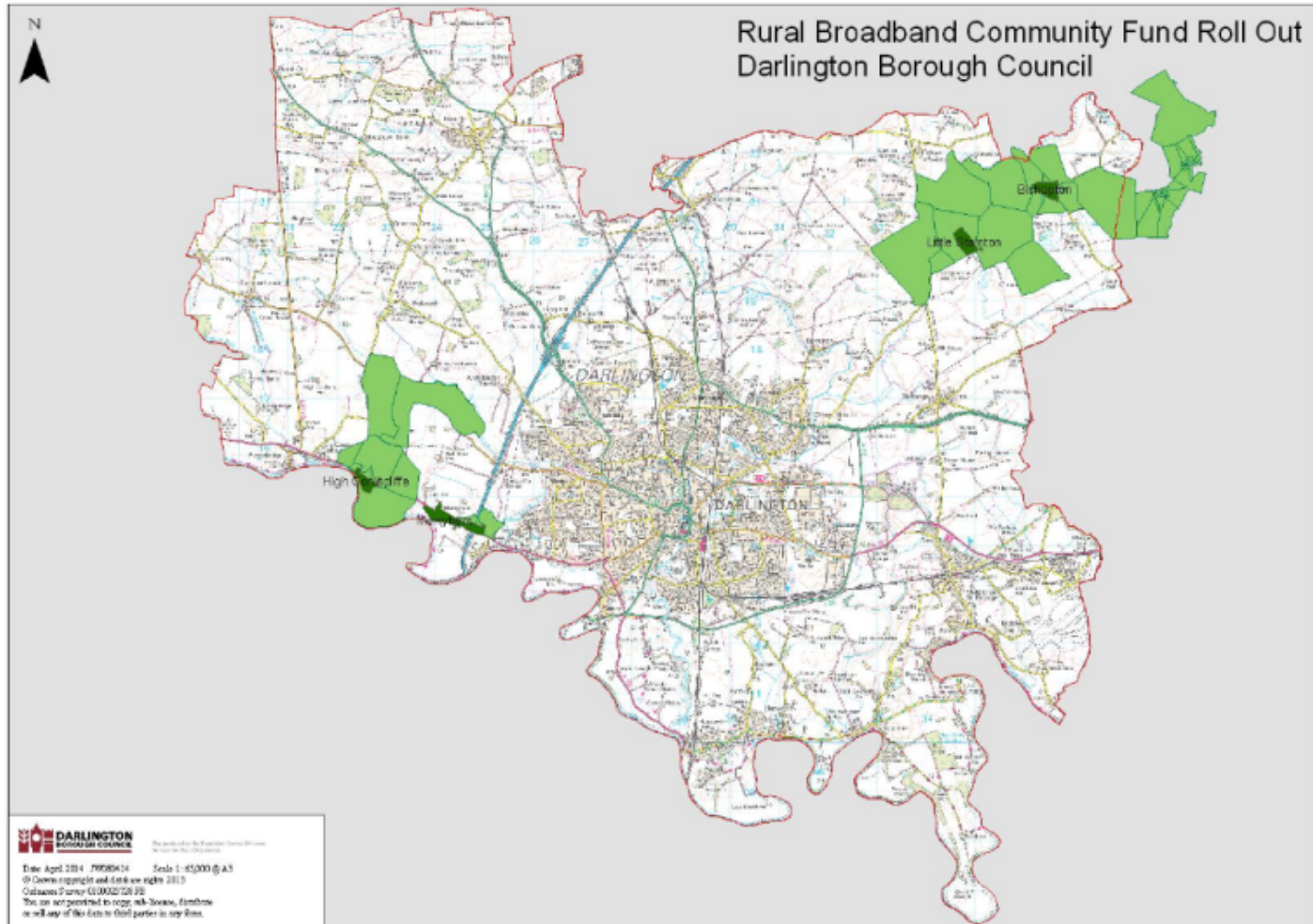
Darlington Town Centre coverage



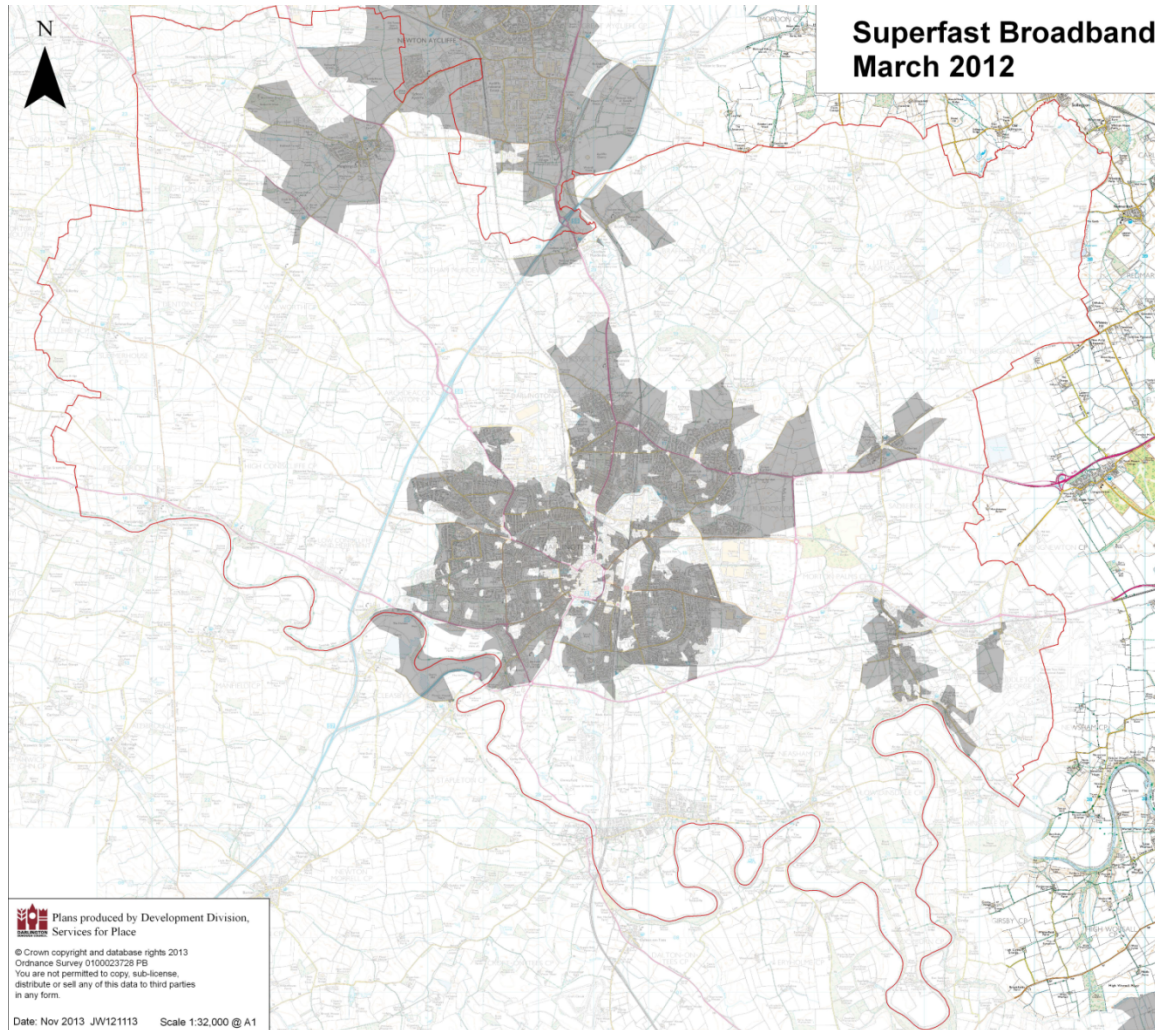
Darlington Cabinets



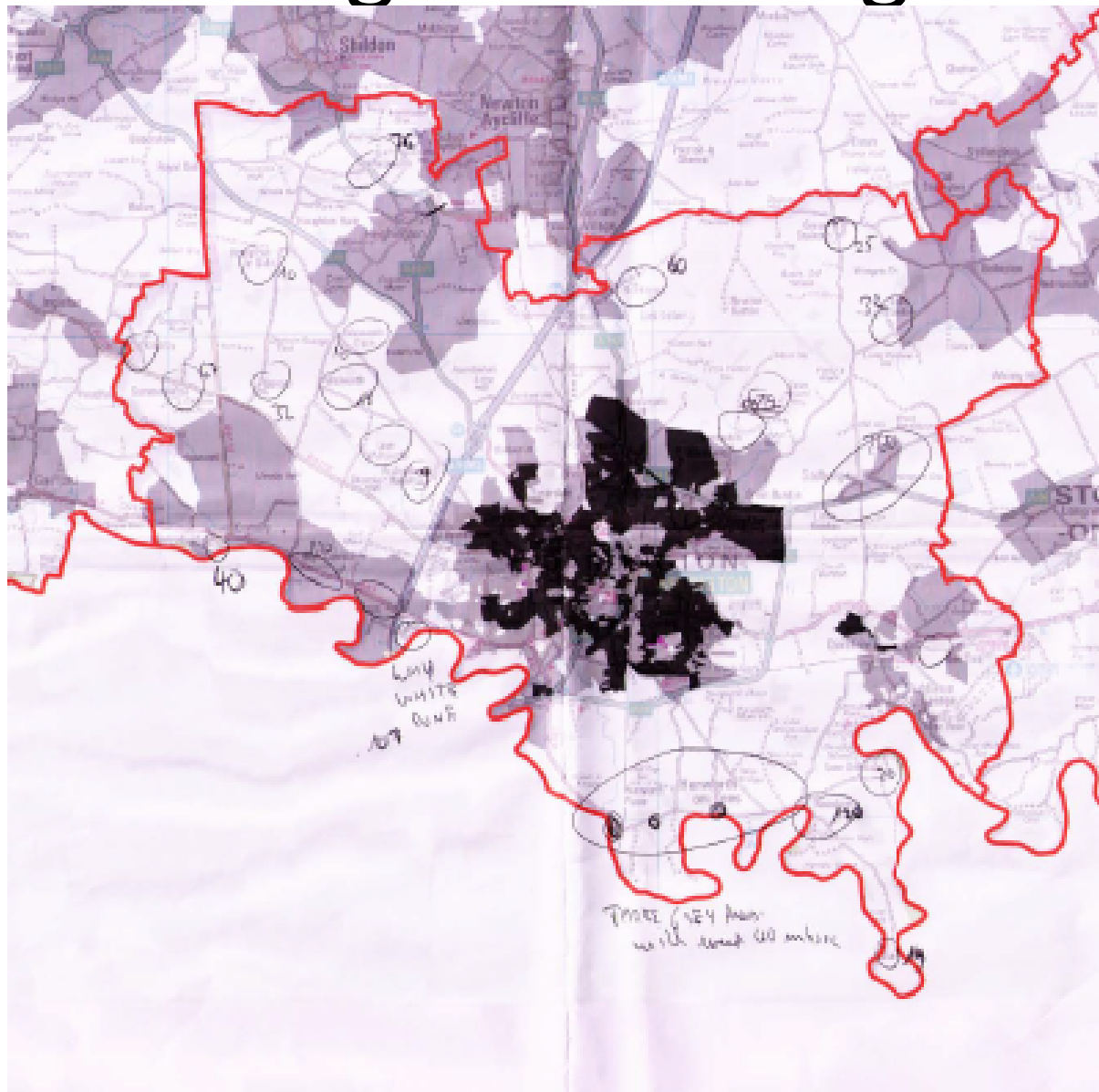
Darlington Rural coverage



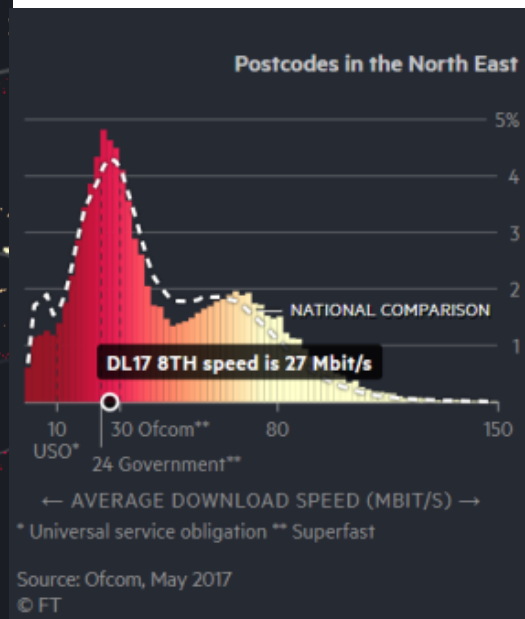
Darlington coverage 2012



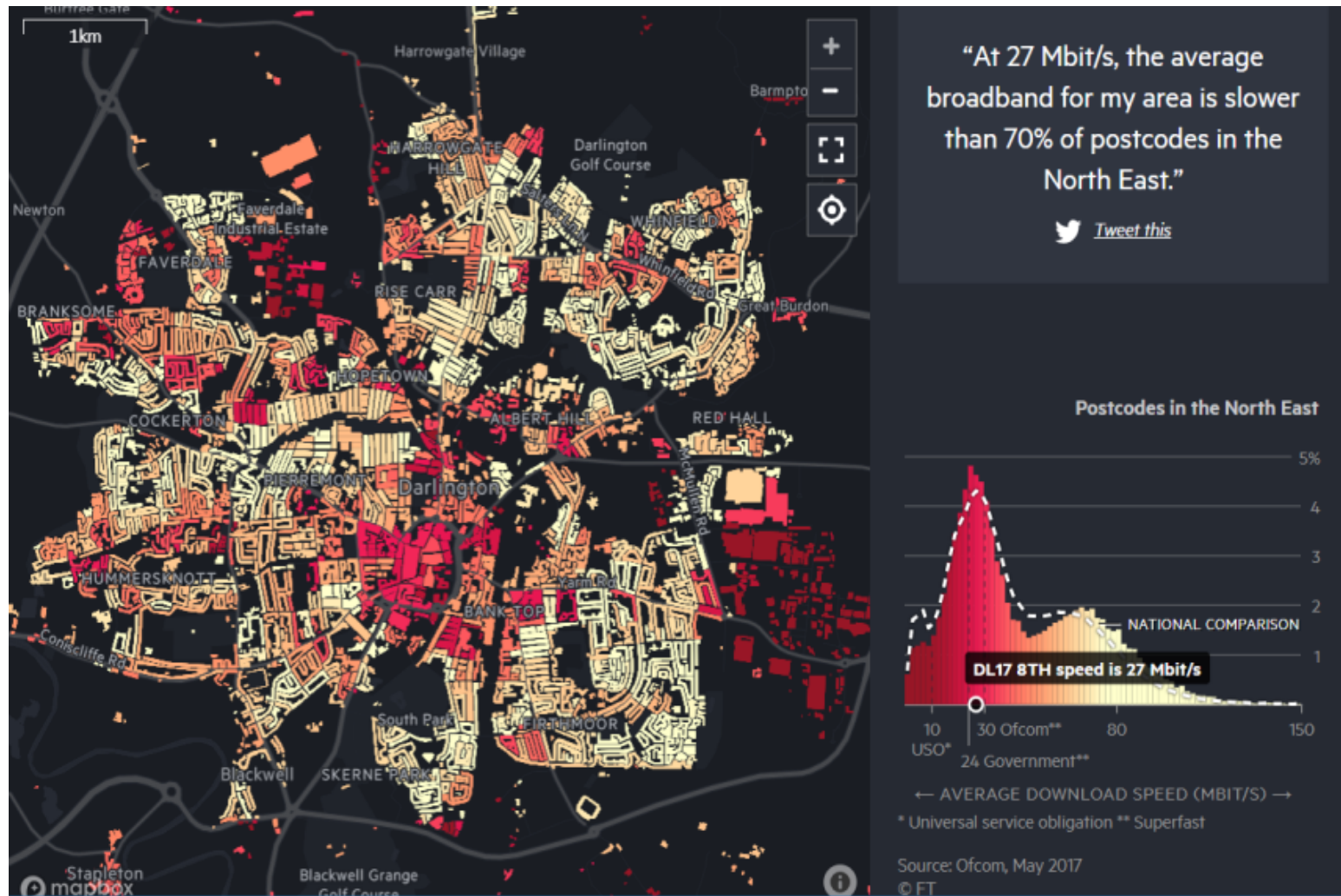
Darlington coverage 2017



Darlington coverage 2018



Darlington coverage 2018

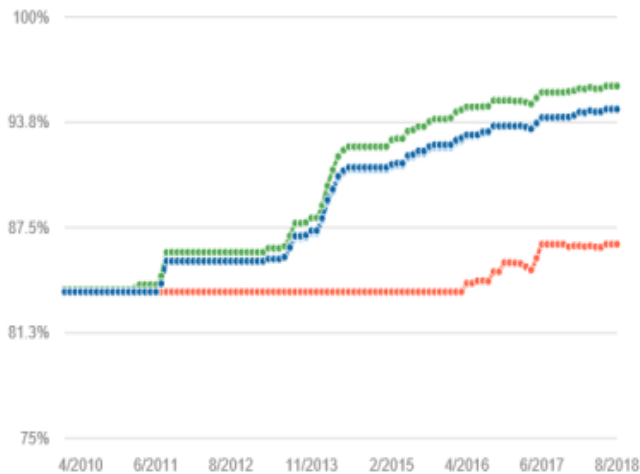


Darlington coverage 2018

Summary for Darlington

Darlington Superfast and Fibre Coverage

Latest Figures History ? -- Fibre -- Superfast (>24 Mbps) -- Ultrafast (>100 Mbps)



Authority classed as Other Urban (OU) ?

Superfast UK (>24 Mbps):	94.53%	Below 2 Mbps down:	0.80%
Superfast EU (>30 Mbps):	94.46%	Below 10 Mbps down:	3.17%
Ultrafast (>100 Mbps):	86.52%	Below 10 Mbps, 1 Mbps up: (Legal USO)	5.10%
Openreach (>30 Mbps):	74.86%	Below 15 Mbps: (High Speed Broadband)	3.56%
Openreach FTTP:	0.83%	Virgin Media Cable:	85.97%
Openreach G.fast:	0.00%		

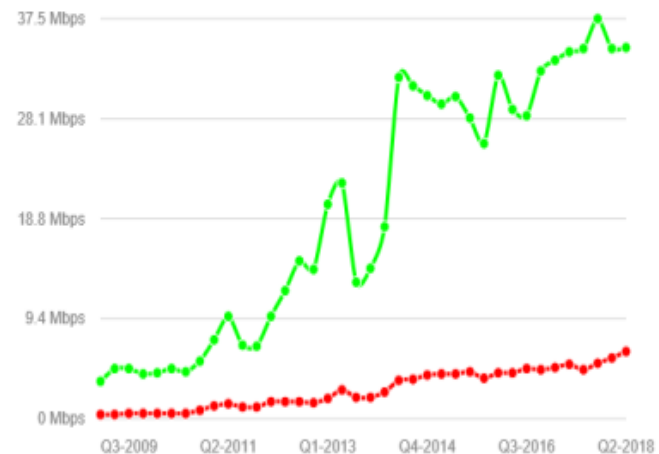
Darlington Speed Test Results (Mbps)

Last Quarter History

Any Openreach ADSL FTTC Cable 3G/4G

ADSL, ADSL2+, FTTC, fibre, cable, mobile and wireless speeds ?

Estimated Takeup: ADSL 25.6% FTTC 25.2% Cable 49.2%



Estimated Maximum Mean Download Speed:

264 Mbps

This figure is based around everyone buying the fastest Virgin Media, KC or Openreach product available to them, based on current product availability. Distance limitations of ADSL2+ and VDSL2 are factored into the calculation.

Speed test results are based on the analysis of results from our [speed test](#) or

3) Future Investment

Public:

Phase 2 BDUK:  **Digital Durham** Programme 2017-2020

TVCA funded: £1m Targets Darlington (focus rural)

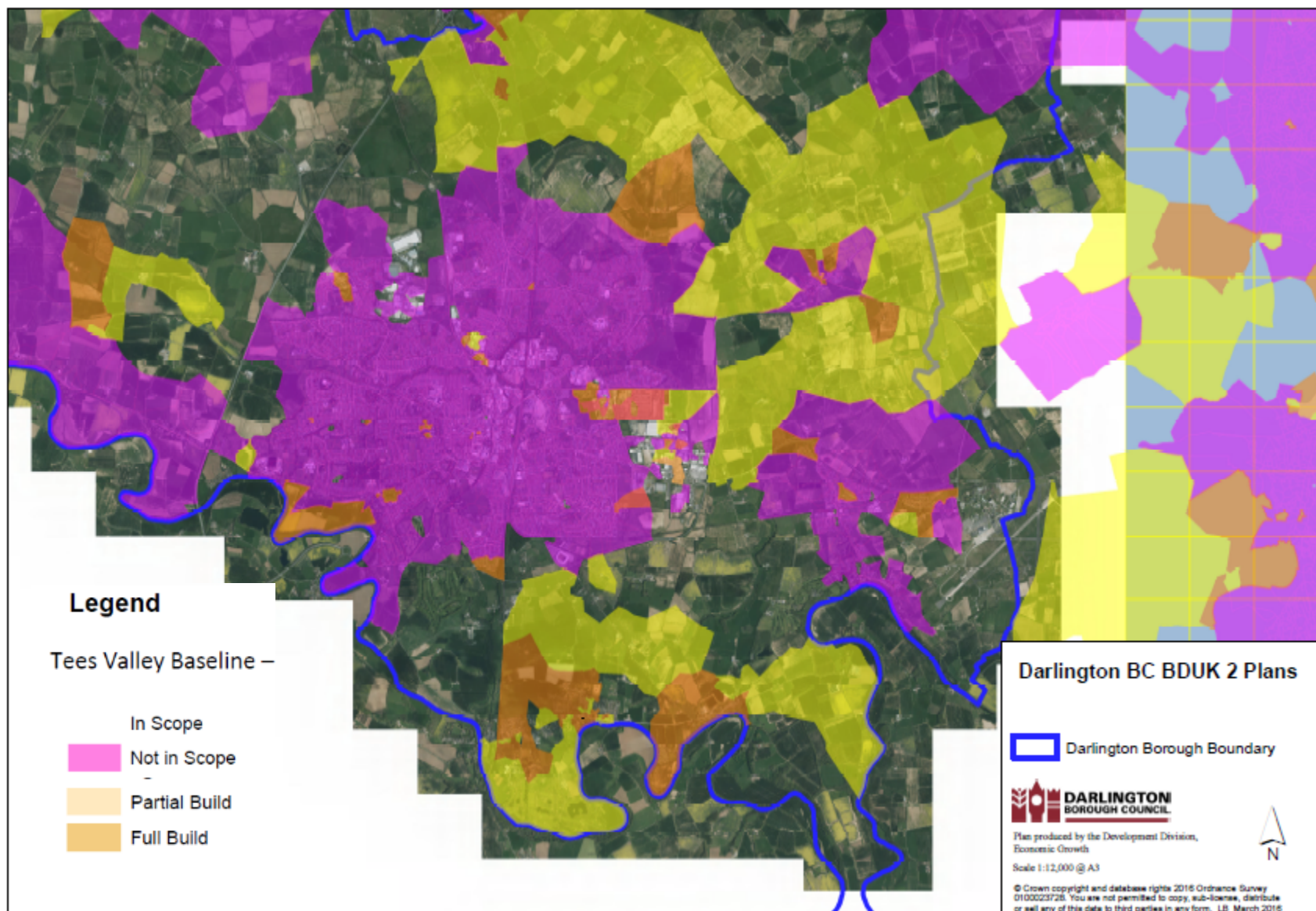
Aim: 98.1% coverage

Phase 3 BDUK: Programme 2020-

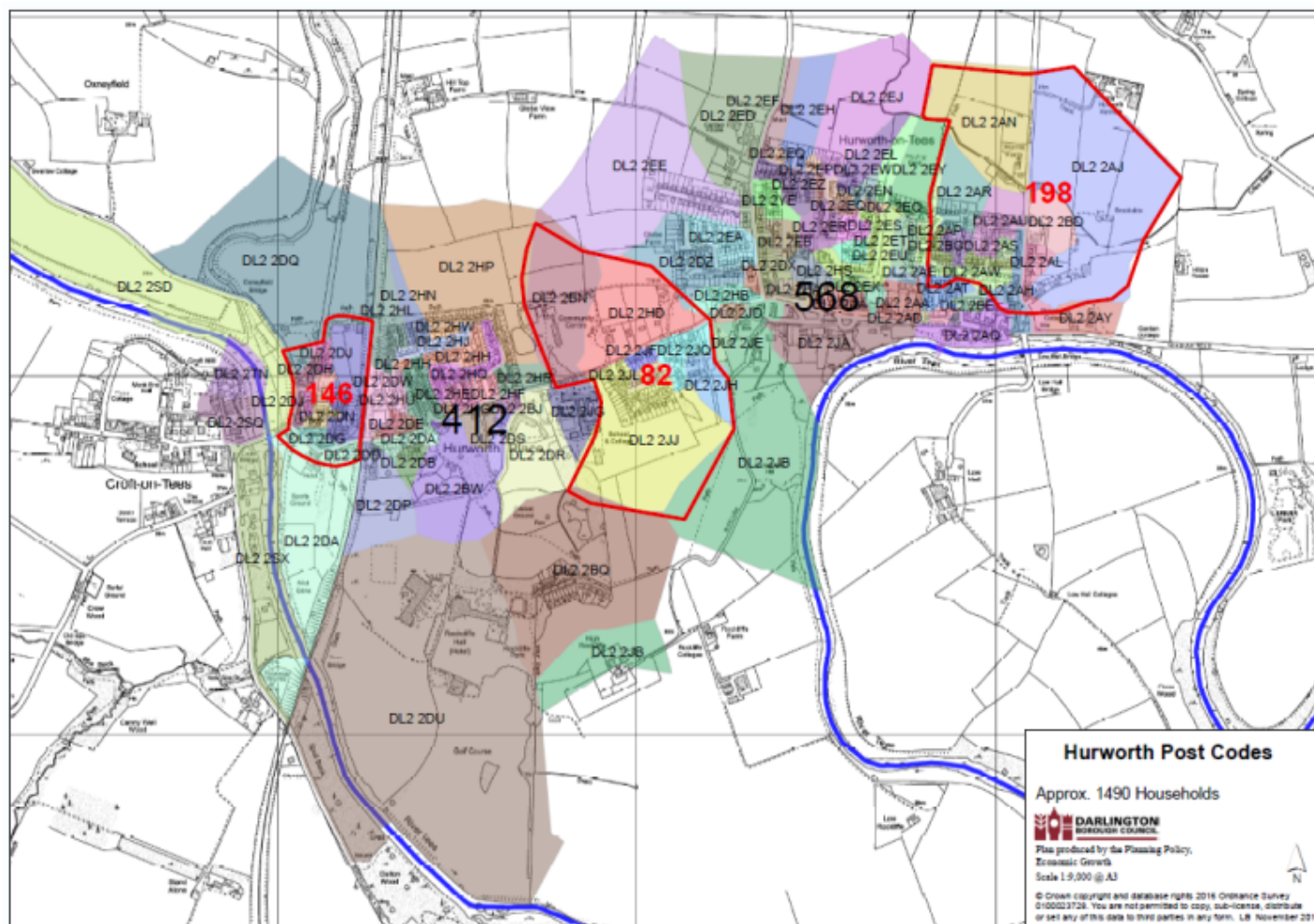
Aim 100% coverage: Targets (Sparse rural hamlets and individual farms) (innovative efficient technology)

TVCA Ambitions: Local Full Fibre Network (LFFN) / 5G Trial and Testbeds / Gigabit Connection Vouchers

3) Future Investment



3) Future Investment



3) Future Investment

Private:

Virgin Media £3bn “Project Lightning”

Mobile Broadband (4G and 5G)

Large Development Sites (residential / business by developer and during construction)