Spatial Data and Maps supporting the LFFN (Local Full Fibre Network) bid



LFFN bid

- Aim of funding is to spread Gigabit connections to "key public buildings and businesses, with the expectation that this leads to broadband providers (ISP) creating additional connections to local homes and businesses".
- Installation of 'Meet-Me' junction boxes subsidise the infrastructure cost a broadband provider may face where implementing additional infrastructure to extend a broadband service
- The speed of Meet-Me boxes is 1GB, a significant increase from the current capacity of NCC's currently hosted sites



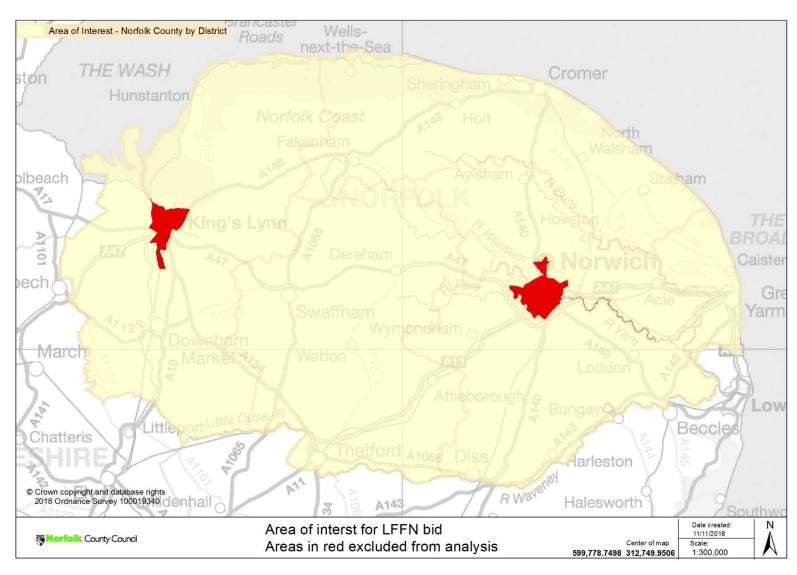
LFFN bid to promote four areas

- Council Services
- Economic Development
- Communities and Residents
- Back Haul

The two areas highlighted in red have been addressed in the data and presented in the maps



Area of Interest – Norfolk excluding Norwich/Kings Lynn



- Norwich and Kings Lynn defined via a process undertaken by Public Health to identify various locations within the County using national standards.
- Areas in Red were excluded from the analysis

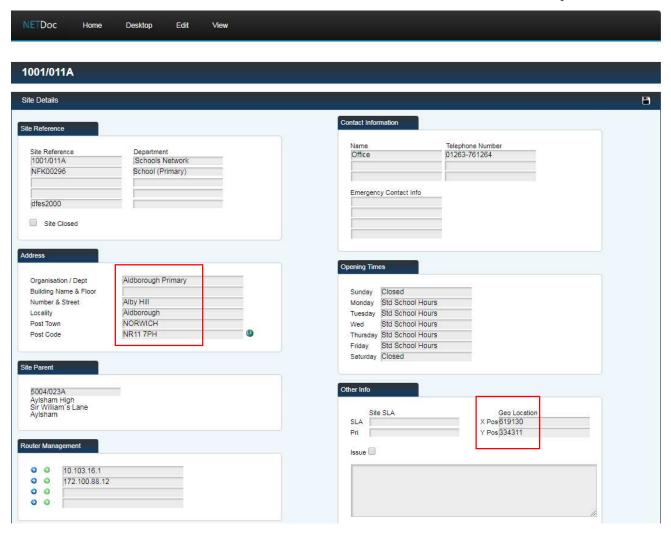


Sites of Interest – The NetDoc Database

- The NetDoc database contains details of all NCC sites that have a computer network managed by NCC.
- The dataset is maintained by the ICT Netwok Team.
- Approximately 390 sites have been mapped in the area of interest roughly more than half of which are schools.
- Sites were predominantly mapped to postcodes based on the address details in the database



NetDoc Database – example entry



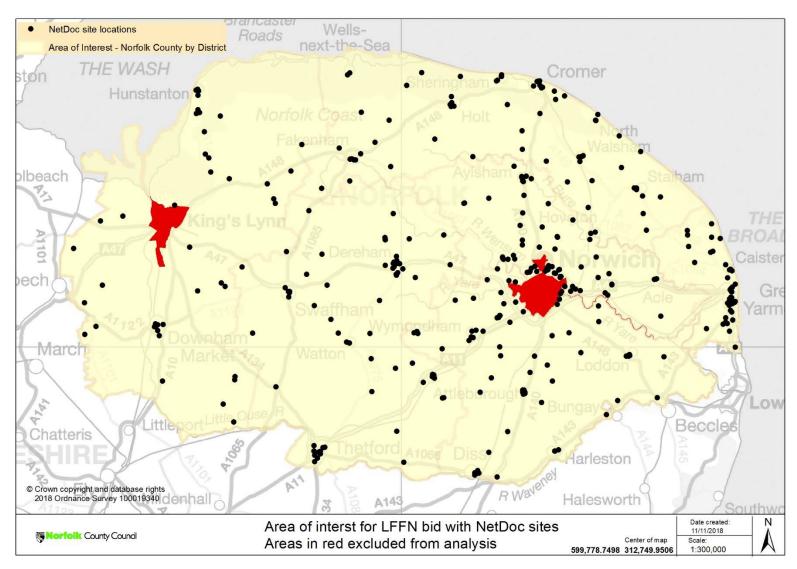


NetDoc Database – example processed data

BJECTID site_ref	dept_1	address1	post_code	post_town	circuit_cost_pa	circuitid	speed	circuit_type	circuit_contract	circuit_supplier	easting	northing
1 GYBC/04	.Corporate Network	Great Yarmouth Borough Council	NR30 2EN	GREAT YARMOUT	2772	ONEA134373	10	0 EAD100LA	Updata	BT Openreach	653052	30720
2 NWMHT/HH	.Corporate Network	Norfolk and Suffolk NHS Foundation 1	NR6 5BE	NORWICH	912	LLEA1353777	FTTC	MPF & FTTC 80/20	Updata	BT Openreach	619952	31182
3 1029/039	.Corporate Network	Adult Social Services	NR21 8SL	FAKENHAM	2772	ONEA433762	10	0 EAD100LA	Updata	BT Openreach	593487	33063
4 6009/080	.Corporate Network	Independence Matters	NR31 8ES	GREAT YARMOUT	912	LLEA1294264	FTTC	MPF & FTTC 80/20	Updata	BT Openreach	651485	30460
5 7013/011	.Corporate Network	Hethel Innovation	NR14 8FB	NORWICH		hethel circuit	3	0 L2L			615588	29996
6 1029/023	.Corporate Network	Norfolk Fire & Rescue Service	NR21 8BB	FAKENHAM	912	LLEA1312189	FTTC	MPF & FTTC 80/20	Updata	BT Openreach	592452	32967
7 Reed House	.Corporate Network	Reed House	NR7 0WF	NORWICH		FTTC_REED_TBC	FTTC	PSTN & FTTC 80/20	Updata	BY Openreach	628380	30891
8 1022/029_2	.Corporate Network	Adult Social Services	NR27 0HH	CROMER		OGHP24231448	FTTC	PSTN & FTTC 80/20	Updata	BT Openreach	622005	34152
9 NFK00205	.Corporate Network		NR7 8SQ	NORWICH		ONEA433679	10	0 EAD100	Updata	BT Openreach	625202	31097
10 gybc/14	.Corporate Network	Great Yarmouth Borough Council	NR30 2PQ	GREAT YARMOUT	912	LLEA1294615	FTTC	MPF & FTTC 80/20	Updata	BT Openreach	652616	30726
11 3074/015	.Schools Network	Chapel Green School	NR171RF	Attleborough		ONEA242435	10	0 EAD100	Updata	BT Openreach	606697	29191
12 6009/042	.Corporate Network	Norfolk Museum Service	NR30 2QH	GREAT YARMOUT	912	LLEA1294346	FTTC	MPF & FTTC 80/20	Updata	BT Openreach	652352	30736



Mapping the NetDoc Sites



*NetDoc is a database that includes details of computer networks in NCC sites



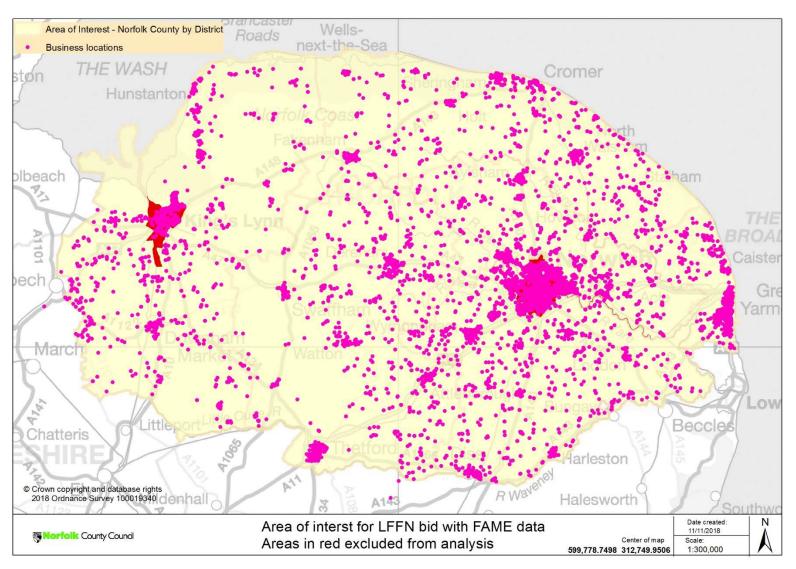
Business location — The FAME database

Business Sites Location data as exported from the Fame Platform (via Economic Development)

- Filtered via specific SIC codes relevant to the type of business more likely to benefit from improved Broadband services
- Resulted in approximately 13K suitable records for review
- Approximately 85% of record included a coordinate pair (lon/lat)
- The remaining datasets were associated with the postcode associated with their registered address. The Postcode dataset was supplied by the Ordnance Survey
- Approximately 12K businesses mapped



Mapping the FAME data

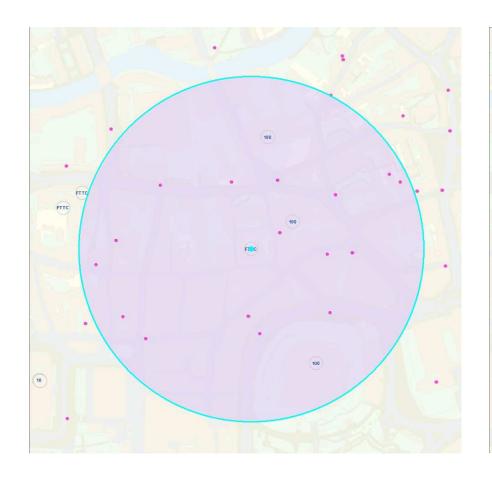


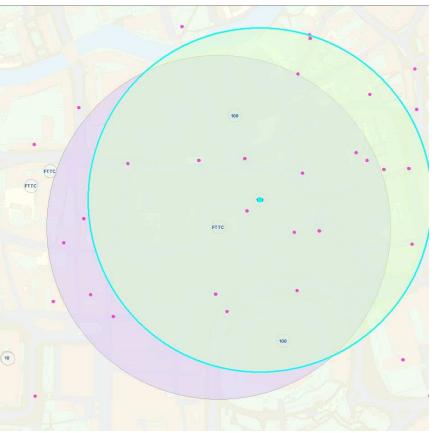
*FAME data was obtained via Economic Development



Data analysed for sites of economic interest

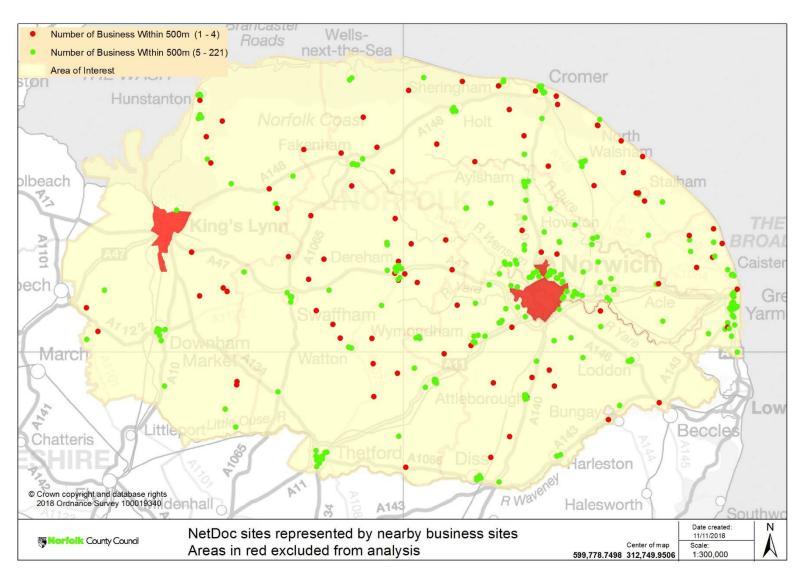
Businesses counted within a 500m radius of each NetDoc site.







NetDoc sites with economic interest



*Based on the number of businesses found to be within 500m of a particular NetDoc site to be equal than or more than 5 businesses.

384 sites in total

266 sites >= 5 businesses within 500m

118 sites < 5 businesses within 500m



Additional Data analysed

- OfCom Ultra Fast Broadband areas
- NCC Norfolk Property Data
 - FireTowers
 - UPRN values to permit an address cross check with a national database



Additional Data analysed

Permits the addition of data to the Netdoc records for prioritisation and filtering:

OBJECTID site_ref	dept_1	address1	post_code	e post_town	circuit_cost_pa	circuitid	speed	circuit_type	circuit_contract	circuit_supplier	easting	northing
1 GYBC/04	.Corporate Network	Great Yarmouth Borough Council	NR30 2EN	GREAT YARMOUT	2772	ONEA134373	10	00 EAD100LA	Updata	BT Openreach	653052	307202
2 NWMHT/HH	.Corporate Network	Norfolk and Suffolk NHS Foundation	NR6 5BE	NORWICH	912	LLEA1353777	FTTC	MPF & FTTC 80/20	Updata	BT Openreach	619952	311828
3 1029/039	.Corporate Network	Adult Social Services	NR21 8SL	FAKENHAM	2772	ONEA433762	10	00 EAD100LA	Updata	BT Openreach	593487	330634
4 6009/080	.Corporate Network	Independence Matters	NR31 8ES	GREAT YARMOUT	912	LLEA1294264	FTTC	MPF & FTTC 80/20	Updata	BT Openreach	651485	30460
5 7013/011	.Corporate Network	Hethel Innovation	NR14 8FB	NORWICH		hethel circuit		30 L2L			615588	29996
6 1029/023	.Corporate Network	Norfolk Fire & Rescue Service	NR21 8BB	FAKENHAM	912	LLEA1312189	FTTC	MPF & FTTC 80/20	Updata	BT Openreach	592452	32967
7 Reed House	.Corporate Network	Reed House	NR7 0WF	NORWICH		FTTC_REED_TBC	FTTC	PSTN & FTTC 80/20	Updata	BY Openreach	628380	30891
8 1022/029_2	.Corporate Network	Adult Social Services	NR27 0HH	CROMER		OGHP24231448	FTTC	PSTN & FTTC 80/20	Updata	BT Openreach	622005	34152
9 NFK00205	.Corporate Network		NR7 8SQ	NORWICH		ONEA433679	10	00 EAD100	Updata	BT Openreach	625202	31097
10 gybc/14	.Corporate Network	Great Yarmouth Borough Council	NR30 2PC	GREAT YARMOUT	912	LLEA1294615	FTTC	MPF & FTTC 80/20	Updata	BT Openreach	652616	30726
11 3074/015	.Schools Network	Chapel Green School	NR171RF	Attleborough		ONEA242435	10	00 EAD100	Updata	BT Openreach	606697	29191
12 6009/042	.Corporate Network	Norfolk Museum Service	NR30 2QF	GREAT YARMOUT	912	LLEA1294346	FTTC	MPF & FTTC 80/20	Updata	BT Openreach	652352	307360

OBJECTID	site_ref	dept_1	address1	post_code	post_town	circuit_cost_pa circuitid	speed	circuit_type	circuit_contract	circuit_supplier	easting	northing	LSOA_Code UFB	B FIRETOWER	UPRN	BUSINESS_COUNT DI	I_EX_AVG_RANK
1	GYBC/04	.Corporate Network	Great Yarmouth Borough Council	NR30 2EN	GREAT YARMOUT	2772 ONEA134373	10	00 EAD100LA	Updata	BT Openreach	653052	307202	E01026626 N	N		22	73
2	NWMHT/HH	.Corporate Network	Norfolk and Suffolk NHS Foundation T	NR6 5BE	NORWICH	912 LLEA1353777	FTTC	MPF & FTTC 80/20	Updata	BT Openreach	619952	311828	E01026529 N	N		10	235
:	1029/039	.Corporate Network	Adult Social Services	NR21 8SL	FAKENHAM	2772 ONEA433762	10	00 EAD100LA	Updata	BT Openreach	593487	330634	E01026748 N	N	10023455269	14	312
4	6009/080	.Corporate Network	Independence Matters	NR31 8ES	GREAT YARMOUT	912 LLEA1294264	FTTC	MPF & FTTC 80/20	Updata	BT Openreach	651485	304604	E01026603 N	N	100090843203	17	99
	7013/011	.Corporate Network	Hethel Innovation	NR14 8FB	NORWICH	hethel circuit	3	30 L2L			615588	299966	E01026913 N	N	2630167002		456
(1029/023	.Corporate Network	Norfolk Fire & Rescue Service	NR21 8BB	FAKENHAM	912 LLEA1312189	FTTC	MPF & FTTC 80/20	Updata	BT Openreach	592452	329672	E01026747 N	Υ	100091555235	28	107
7	Reed House	.Corporate Network	Reed House	NR7 OWF	NORWICH	FTTC_REED_TBC	FTTC	PSTN & FTTC 80/20	Updata	BY Openreach	628380	308918	E01026509 N	N		184	471
8	1022/029_2	.Corporate Network	Adult Social Services	NR27 OHH	CROMER	OGHP24231448	FTTC	PSTN & FTTC 80/20	Updata	BT Openreach	622005	341520	E01026778 N	N		9	162
9	NFK00205	.Corporate Network		NR7 8SQ	NORWICH	ONEA433679	10	00 EAD100	Updata	BT Openreach	625202	310974	E01026560 N	N		21	233
10	gybc/14	.Corporate Network	Great Yarmouth Borough Council	NR30 2PC	GREAT YARMOUT	912 LLEA1294615	FTTC	MPF & FTTC 80/20	Updata	BT Openreach	652616	307261	E01026624 N	N		55	37
11	3074/015	.Schools Network	Chapel Green School	NR17 1RF	Attleborough	ONEA242435	10	00 EAD100	Updata	BT Openreach	606697	291910	E01026421 N	N	10011993348		357
12	6009/042	.Corporate Network	Norfolk Museum Service	NR30 2QH	GREAT YARMOUT	912 LLEA1294346	FTTC	MPF & FTTC 80/20	Updata	BT Openreach	652352	307360	E01026623 N	N	10012183487	64	57
13	1029/014	.Corporate Network	Fakenham Registry Office	NR21 9DY	FAKENHAM	912 LLEA1305451	FTTC	MPF & FTTC 80/20	Updata	BT Openreach	591909	329820	E01026746 N	N	100091555488	106	410
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19/11/2018

NetDoc sites in areas of Digital Exclusion

Recalling the four strands of interest for the LFFN bid

- Council Services
- Economic Development
- Communities and Residents
- Back Haul

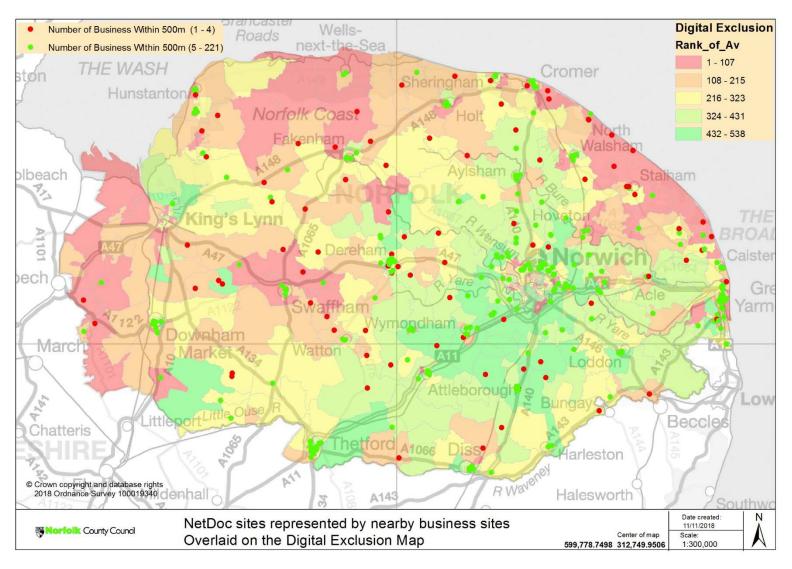


Digital Exclusion data

- Prepared by the Insights Team and presented at the July Digital Innovation and Efficiency Committee meeting
- Minutes and methodology for the dataset are available online



Digital Exclusion data mapped



Red dots inside red areas:

We can see a number of Netdoc sites that may not be of interest in the sense that they don't have many nearby registered businesses (the red dots)

When overlaid with the Digital Exclusion map we can see they may benefit areas flagged as being potentially digitally excluded.



Ongoing work

• NHS and GP surgeries



Additional datasets shown in the map

- Additional Reference datasets mapped
 - Schools
 - Libraries
 - Railways



Online map is available

An interactive map showing the above datasets is available at the following Internet address:

https://norfolkcc.maps.arcgis.com/apps/MapTools/index.html?appid=b 9338c7dadc5473f919e85c58d820245



Copies of the data and analysis results

Copies of the data and analysis are available on the NCC Sharepoint site at the following Internet address:

https://norfolkcounty.sharepoint.com/sites/LFFN_Bid/SitePages/Home.aspx



Further information and questions

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