



CityFibre

 **GIGABIT
CITY
YORK**

CASE STUDY

City of York Case Study

Originally built to serve the City of York Council's (CYC) estate of schools and council offices, CityFibre's dark fibre network, spanning the city, has been used to serve York's thriving business community and became a platform for the UK's first at-scale trial of Fibre to the Home with the help of Sky and TalkTalk.

Now one of Europe's best digitally-connected cities with a full-fibre infrastructure underpinning the local authority, businesses community and residents alike, York is a frontrunner in the UK's digital transformation. It has become a flagship Gigabit City project that demonstrates what can be achieved with a pioneering fibre infrastructure vision and a community determined to make the most of a digital head-start.

In this piece, we look at the different stages of the project and how they have impacted the city;



York's businesses benefit

With dense, high fibre-count access in the city centre, and resilient ring architecture reaching key business parks on the outskirts of York, the network route was carefully designed to reach all key business clusters in the city. Pursuing its wholesale model, CityFibre soon made the network available to a small portfolio of service providers who in turn were able to offer a new generation of ultra-fast and gigabit speed services to businesses throughout the city.

Partners such as York Data Services (YDS) worked closely alongside CityFibre to drive awareness and adoption of new full-fibre services. Previously stranded on increasingly unreliable, inadequate and outdated copper networks, businesses leapt at the opportunity of connecting to the new network. Momentum was further stimulated by the government's 'connection voucher' scheme, providing businesses with up to £3000 towards connection costs when upgrading to a next generation fibre network.

Today the CityFibre network continues to support hundreds of businesses in the city, with more making the switch to full-fibre every day. The network has helped position York as one of the world's best sites to locate and grow a business dependent on access to high-bandwidth services.



“Our connectivity is not only helping to create new jobs and attract investment, but it's making York an enviable business destination. The gigabit network and widespread Wi-Fi allows creative companies to communicate and exchange data with global clients at blistering speeds in an inspirational city.”

Coun. David Carr
Leader of City of York Council

Transforming the Public Sector

In 2008, CYC were looking to both upgrade and simplify their council communications network. Multiple network and maintenance contracts had created a complex tangle of agreements with various service providers, delivering sub-par connectivity across the council network. With over 100 sites including 70+ schools and the councils' new head-quarters to connect, and a constrained budget to work with, CYC began the search for a network solution under a single managed service contract. Its objectives included:

- Enabling economies of scale by rationalising and optimising network provision
- Decoupling the link between bandwidth and opex as network utilisation increases
- Providing a platform for service innovation and enabling rapid introduction of new services without making existing investment redundant

A year later, CYC had signed an 8-year contract worth £13.7m with Pinacl Solutions and its preferred network provider CityFibre, to provide managed services including broadband connectivity, advanced telephony, video conferencing, CCTV and a variety of urban traffic management services – supported by the only platform capable of meeting the council's requirements – a future-proof, dark fibre network.

With over 100 sites to connect in a short time-frame, network planning was complex, but by January 2011, a little more than a year after construction began, over 100km of network had been built with minimal disruption to the city.

CYC has since enjoyed a single, unified IP network across the whole of York, using dark fibre. Alongside the provision of next generation speeds into the city's schools, it has since connected its entire CCTV and traffic management estates as well as libraries and access points providing free, public Wi-Fi throughout the city. Just as importantly, CYC had helped secure a multi-million private investment in a state-of-the-art digital infrastructure that would soon go on to transform the capabilities of the city's businesses and residents.

“The network gives us the control we need and makes us more likely to attract new business and commerce into the area that can benefit from cost-effective, commercial rates

“The outcomes far exceeded the council's initial expectations. This is an extremely good project for the whole of York and one that, we believe, puts us in the top five UK councils in terms of footprint. It gives us unprecedented future proof investment and is an excellent platform to build upon.”

Roy Grant
Head of ICT
Leader of City of York Council

A Gigabit Test-bed

In 2014, York was selected as site for a trial Fibre-to-the-Home (FTTH) deployment by a new joint venture comprising CityFibre, Sky and TalkTalk. The full fibre build was intended to evaluate cost assumptions, innovative narrow-trenching deployment methodologies and consumer interest in ultra-fast and gigabit speed services.

The city was chosen due to the existence of CityFibre's expansive metro fibre network. With a fibre spine in place, the construction process was significantly accelerated and in 2015 the rollout began with the roll-out soon passing over 13,000 homes.

Both Sky and TalkTalk introduced market-leading ultra-fast and gigabit speed broadband packages at highly competitive price-points. Using targeted local sales and marketing campaigns run in parallel with the build, take-up exceeded expectations with penetration rates of over 40% in some areas less than 18 months after construction. The residents of North York would be among the first in the UK to get symmetrical gigabit-speed connections, transforming their digital capabilities.



York timeline

2008

- CityFibre wins contract to provide services to CYC with Pinacl

2010

- Local offices established, metro network design begins

2012

- 1st phase metro network complete, over 100km built
- York Data Services selected as lead business ISP

2014

- Joint Venture announcement with Sky and TalkTalk to trial FTTH deployment, construction methodologies and economics

2016

- First gigabit services go live to York residents
- Deployment to 13,000 homes completed



2009

- CYC signs 8-year contract with Pinacl and CityFibre

2011

- Metro network construction commences

2013

- CYC CCTV operations migrated to new fibre network

2015

- FTTH network deployment commences in North of city

2017

- 40% penetration achieved in best performing cabinet areas

About our Gigabit City projects

Our privately funded Gigabit City model continues to gain momentum and has already transformed many towns and cities across the UK.

Examples of just some of our projects include:

**GIGABIT CITY
BRADFORD**

**GIGABIT CITY
HULL**

**GIGABIT CITY
LEEDS**

**GIGABIT CITY
WAKEFIELD**

✓ Over **125Km** of network

✓ **380+** sites connected

✓ **Award-winning** ultrafast public Wi-Fi

✓ **Fully-Connected** CCTV and traffic management

✓ **70+** Schools with gigabit speed service

About CityFibre

As the UK's largest independent provider of fibre network infrastructure, CityFibre builds and operates networks that bring the benefits of Gigabit connectivity to communities and help cities compete globally.

Through our networks, Smart City visions are becoming a reality; driving economic growth and prosperity and paving the way for a future of 5G, IoT and beyond.

Contact us to discuss how a Gigabit City project could benefit your town or city

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