



# Street Hubs

## Beyond connection

Supporting local councils with digital street communication

This is an interactive document



# Contents

<b>Councils face many challenges</b>	<b>3</b>
<b>How can Street Hubs help?</b>	<b>4</b>
<b>Smarter streets</b>	<b>5</b>
Ultrafast Wi-Fi	5
Real-time information sharing	6
Access for all	6
<b>Safer streets</b>	<b>7</b>
Free phone calls and dedicated emergency call buttons	7
Public messaging and connectivity	7
Health and safety	8
<b>Sustainable streets</b>	<b>9</b>
Economic design	9
Energy saving	9
Environmental protection	10
Future-ready infrastructure	10
<b>COVID-19 and beyond</b>	<b>11</b>
Public Health England Campaign (PHE)	11
Local Council Support	11
London Mayor's Office (GLC)	11
Maida Vale	12
Ealing	12



# Councils face many challenges

In a rapidly changing community landscape, your focus is on the environment, infrastructure and housing. Planning Smart Cities of the future is challenging with extremely limited financial and human resources.

## Environment

- Limiting the impact of future plans
- Monitoring air quality and traffic
- Supporting safety, sustainability and the wider environmental agenda.

## Infrastructure

- How to support resident activities
- Demands for better broadband
- Reducing street clutter.

## Housing

- Tackling the 'digital divide'
- Increasing Wi-Fi and mobile coverage
- 'Future-proofing' cost-effectively.



# How can Street Hubs help?

Street Hubs bring councils, communities and citizens wide-scale digital connectivity at no cost – entirely run and installed by BT.

Our street transformation team are moving on from InLink to the next evolution of public connectivity, updating and evolving the payphone estate for today's digitally connected converged-media society.

With 2021 marking the **100th anniversary** of the original K1 kiosk, now is the perfect time to discuss how you can move past limited landline-only infrastructure – not just connection, but moving...

...beyond connection



## 484 Street Hubs

are already in place, bringing people across the UK together<sup>1</sup>

# Smarter streets

Ultrafast Wi-Fi and small cell 4G / 5G capabilities bring improved connectivity and digital access to public infrastructure, with mobile infill and real-time information sharing.

## Ultrafast Wi-Fi

Full fibre internet allows lightning-fast Wi-Fi connectivity for everyone. Residents, tourists and local businesses can access online services with any internet-capable device, and councils can take advantage of the Internet of Things when improving urban areas.

- **Hotspot 2.0** brings universal high-speed internet
- **1Gbps speeds**, the UK's fastest free public Wi-Fi
- **Full fibre** allows speeds up to 13.9 times faster than standard fixed-line home broadband
- **Content filtering** to prevent access to adult-only websites
- **Simple sign up** through a one-time email address registration
- **Automatic connection** whenever user is in range
- **Customer-first policies** – no pop-ups, email addresses are not sold on.

Our leading cybersecurity experts give you guaranteed speed, coverage and quality.

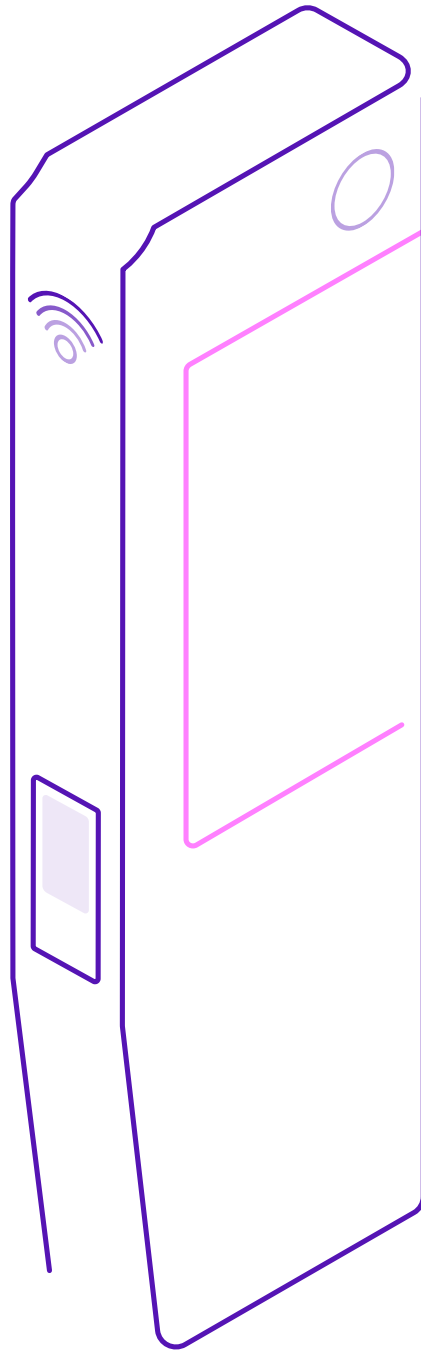
**320,000Gb**

of free Wi-Fi data<sup>2</sup>

**10.5m**

Wi-Fi sessions<sup>3</sup>





# 42,800

weekly hours of community content<sup>4</sup>

# 283m

weekly media plays<sup>5</sup>

## Real-time information sharing

Instantly updatable screens for councils to spread important public health and safety messages, as well as updates on council services. Local citizens and businesses benefit from accessible advertising and greater awareness of available services, while tourists enjoy enhanced wayfinding.

- **Two 75" displays** allows free, real-time information sharing in 10-second intervals
- **5% screen time** dedicated to council messaging – 438 hours a year per display, or 876 per unit
- Easy access to and sharing of **local / council services**
- **Digital, always-updated BT phonebook**
- **Live and local weather information and warnings**
- **Maps and wayfinding** – directions to local landmarks and services
- **FAQs and instructions.**

## Access for all

Built from the ground-up to be inclusive for more people, removing boundaries for those with disabilities and giving them greater access to council services. Street Hubs helps everyone in towns and cities get in touch with friends, family and local businesses.

- **Two marine-grade waterproof USB ports** featuring Quick Charge 2.0
- **Easy-touch** emergency call button
- **Wheelchair-accessible tablet** (1m height)
- **High-contrast large-type labels** allow easier reading for the vision impaired
- **Relay UK** provides speech-to-text for people with hearing or speech difficulties
- **TalkBack functionality** – text-to-speech for blind/vision impaired users
- **Hearing induction loops** let hearing aid users make calls easily
- **Familiar tablet interface** for frictionless adoption.

We're a trusted partner with an unmatched legacy of innovation and deployment.

The same attention to detail flows through everything we do.

# Safer streets

Free public digital communication and an evolved payphone estate reduces anti-social behaviour and provides quick and free access to emergency services for everyone.

## Free phone calls / dedicated emergency call buttons

Always available national phone calls, completely free of charge, keep communities connected and safe. A dedicated 999 button puts tourists and residents in contact with lifesaving services in just two taps, while councils and businesses benefit from increased contact about services.

- **Free phone calls** to anywhere in the UK (mobile, local or national)
- **No need for handset** – calls use tablet and microphone
- **Caller privacy** offered by headphone jack
- **Directional speaker** and **noise-cancelling microphone** offer call clarity and quality
- **Dedicated 999 call button** that automatically shares location
- **Anti-accident** two-touch emergency call implementation.

We'll work with you to bring more positive changes like this to your streets.

## Public messaging and connectivity

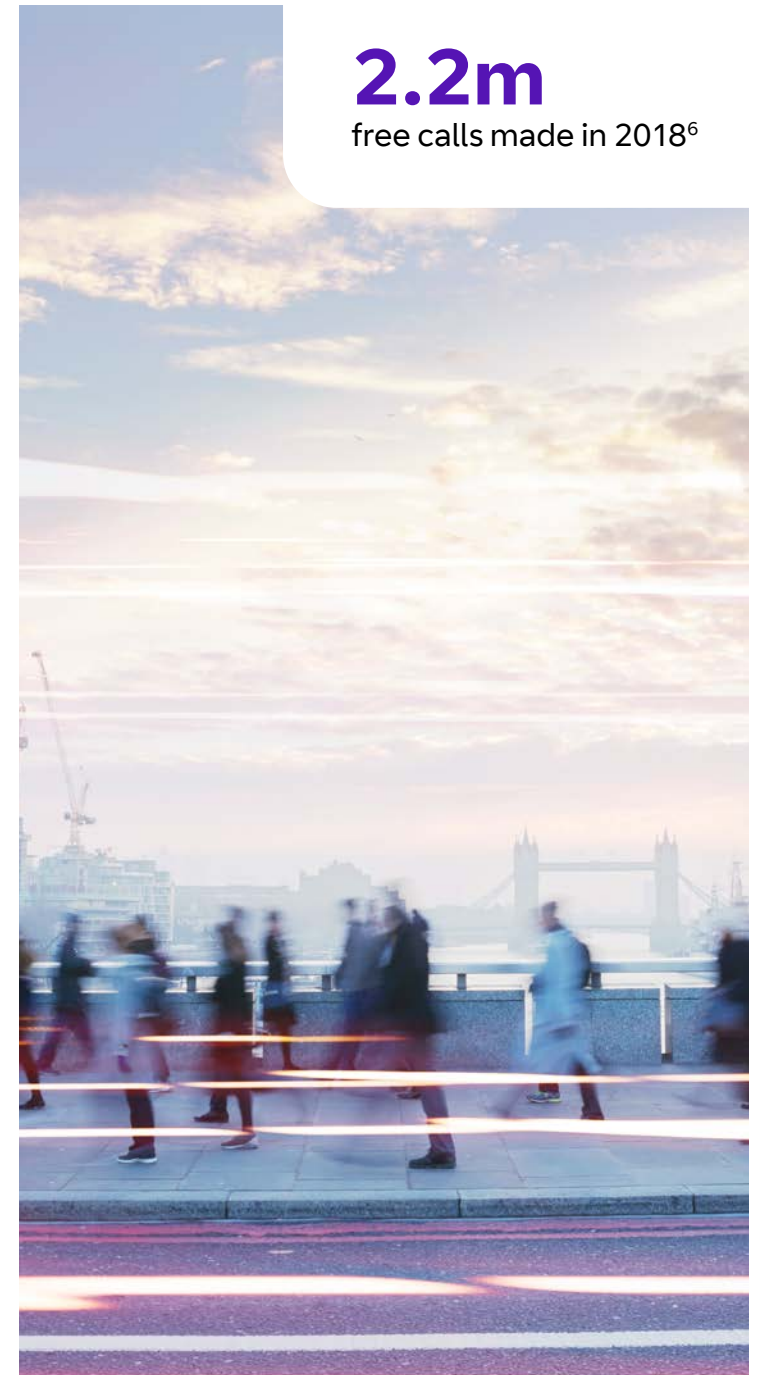
Each unit expands mobile network coverage with 5G enablement, allowing councils a cost-effective and mast-free method of meeting the demands of their digitally-connected citizens and ensuring better access to public health resources and emergency messaging / contacts.

- **Small cell infill coverage** gives your streets greater mobile connectivity
- **5G enablement** for lightning-fast data downloads
- **Screens controlled dynamically** – emergency messaging can be displayed, with unique instructions on each unit / screen
- **Public health / community / emergency messaging** with remote upload control
- **Access to public health services and emergency contacts.**

Only we bring the capability to upgrade your payphone estate to offer publicly available digital communication.

# 2.2m

free calls made in 2018<sup>6</sup>



## Health and safety

Sensors inside each unit and regular inspections by BT staff ensure Street Hubs continue to serve local communities. Various measures against anti-social behaviour and misuse keep the units as a positive contribution to the areas they're in, and spare councils from liability.

- **Inspected weekly**, tested and cleaned at least every two weeks
- **Monitored 24/7** by sensors in unit
- **Operated in accordance with Street Hub Anti-Social Behaviour Management Plan** – developed with the police and local authorities
- **Automatic anti-social call blocking**, identifying suspicious call patterns and phone numbers and blocking across network
- **One-touch connection to four national charities**
- **Session timeout** after 30 seconds, securely wiping all user sessions
- **Ring-fenced system** does not allow open web browsing
- **No incoming calls** prevents 'prank calling'
- **Power-only USB ports** to avoid tampering.

We're configuring infrastructure to make streets safer places for citizens and businesses.



**1.5m**  
tablet sessions<sup>7</sup>

**438 hours**  
per year, per screen for  
free council advertising /  
messaging space<sup>8</sup>



# Sustainable streets

Reduced street clutter, environmental air, noise and traffic monitoring, and future-ready infrastructure providing a safer and more connected environment now and in the years to come.

## Economic design

The sleek, modern and sturdy design of Street Hubs beautifies urban areas and funds removal of existing outdated kiosks. Councils get more street-space to make use of, and communities and businesses can enjoy the improved aesthetics of the areas they live and work in.

- **A quarter the footprint (0.42m<sup>2</sup>) of a phone box**, reducing street clutter
- Small profile – **35cm deep, 124cm wide, 298cm high**
- **Funds removal of two BT payphone kiosks**, giving back 1.78m for each installation
- **High-quality materials** hold up to abuse, vandalism and wear-and-tear
- **Reduced glare** with displays fronted by tempered and laminated glass
  - Galvanised mild steel structure, powder coated external grade aluminium exterior
  - Painted powder-coated aluminium main casing – attractive, durable, easy to service, and cooling
  - RF transparent radio compartment
- **Modular design of exterior / interior** for simple replacement
- **No handset**, which was frequently vandalised.

## Energy saving

Every unit is designed to be efficient to run, powered by renewable energy and built with high-quality parts to optimise up-time and lower running costs, giving councils maximum service with minimal friction. Councils and businesses benefit from enhanced insights, while communities enjoy anti-light pollution measures and ethical energy usage.

- **100% renewable carbon-free energy**
- **Automatic screen dimming** based on daylight hours, down to 600cd/m<sup>2</sup> in accordance with guidelines from Institute of Lighting Professionals, *Professional Lighting Guide 05: The Brightness of Illuminated Advertisements*
- **State-of-the-art LED-backlit LCD screen** consumes less power
- **Industrial-grade components** lower the need for cooling
- **High-efficiency power supplies** – 80% compared to a typical 65-70%
- **Integrated operating system / dashboard** gives quick access to insights.

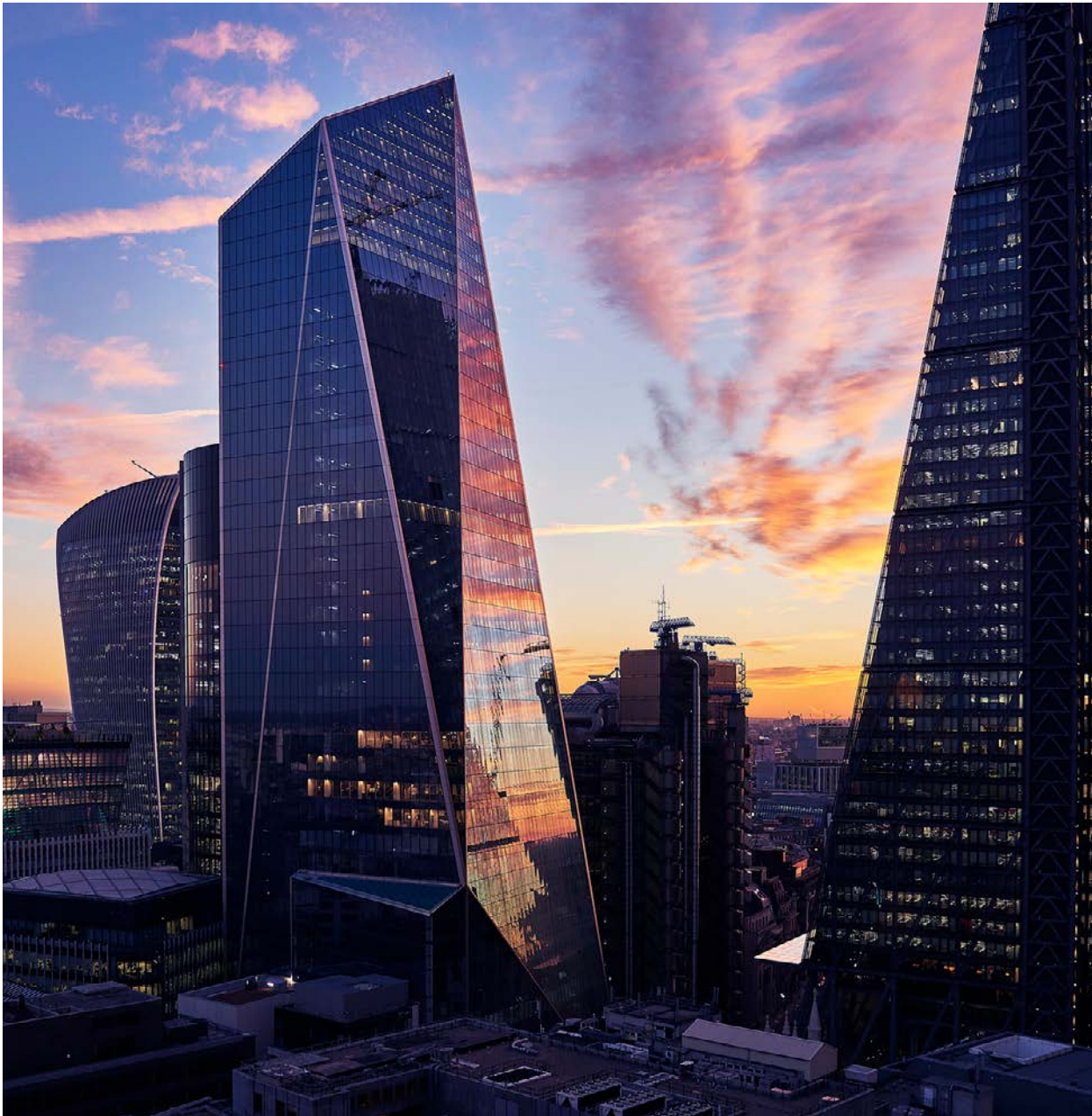
We're the perfect partner to deliver positive change.

**296m<sup>2</sup>**

of pavement space de-cluttered<sup>9</sup>



A unique opportunity to incorporate historic red phone boxes and the digital future.



# Smart City enablement

Street Hubs can house equipment to make smarter towns and cities a reality, from optional equipment to monitor various types of pollution to traffic management and more. Our team are happy to work with you to determine which features would best help you realise your vision for your town or city.

- **Air quality:** continuous air quality assessment feeds to central control for monitoring of **NO**, **NO<sub>2</sub>** and **CO<sub>2</sub>** (Nitric Oxide, Nitrogen Dioxide and Carbon Dioxide)
- **Possible future measurement** of Ground Ozone Level (O<sub>3</sub>), PM10 and PM2.5 particles, and Sulphur Dioxide (SO<sub>2</sub>)
- **Noise pollution:** environmental sensors monitor noise levels 24/7
- **Speaker volume auto-lowers** at night, except for emergency calls
- **Temperature monitoring** helps pavement maintenance planning / public health advice
- **Pedestrian, bike and vehicle counting**
- **Smart City planning** key waypoint
- **Insight into your streets** with in-built sensors
- **High-speed electric vehicle charging points**
- **Upgradable without street works** (e.g. 1Gbps to 10Gbps).

We're building smarter, safer, more sustainable public infrastructure.

# COVID-19 and beyond

Millions of people in UK towns and cities saw public health information during the pandemic, thanks to the street transformation team's support of three key information initiatives.

## Public Health England Campaign (PHE)

We **doubled screen time** for the PHE Stay at Home campaign, regularly updating guidelines into short, digestible snippets on Street Hubs across the UK.



## Local Council Support

We **collaborated with local councils** to offer support for localised messaging.



## London Mayor's Office (GLC)

We supported GLC messaging for consistent communication across **14 London boroughs** with the **Stay at Home** and **London Together** campaigns.





Beyond the coronavirus, we helped Maida Vale and Ealing save millions of pounds, offering residents and visitors free 1Gbps Wi-Fi, free calls, and decluttered pavements, at no cost to them. We also supported the police in Camden Town, reducing mobile phone thefts.

### Maida Vale

- Estimated **£4.8m over 10 years** to install a fibre optic Wi-Fi network
- Expected to offer **86,000 free calls a year worth £62,000.**

### Ealing

- Estimated **£4m over 10 years** to install a fibre optic Wi-Fi network
- **25 Street Hubs** expected to offer 100,000 free calls worth £60,000
- 50 glass payphones removed creating **44m of pavement space** – enough for:
  - **32 trees**
  - **65 bicycle parking spaces.**

### Camden Town

- **Partnered with police** in north London to tackle phone snatchers on mopeds
- **Personalised content** created with local figures to raise awareness in key areas
- **Significant reduction in thefts** over the course of the campaign
- **Similar content** used to encourage Neighbourhood Watch participation.



**Offices Worldwide**

The services described in this publication are subject to availability and may be modified from time to time. Services and equipment are provided subject to British Telecommunications plc's respective standard conditions of contract. Nothing in this publication forms any part of any contract.

© British Telecommunications plc 2021. Registered office: 81 Newgate Street, London EC1A 7AJ. Registered in England No. 1800000.

February 2021