







## **Foreword**

The UK is at a key inflection point. The Government has ambitious plans to drive economic growth by, not least, developing new infrastructure, accelerating the transition to net zero, improving connectivity, and building more homes.

While Government's focus on driving growth through green investment and planning reform is welcome, there are several challenges holding back these ambitions and slowing the pace of delivery.

The UK's ageing infrastructure, lack of a skilled workforce and inflexible regulatory frameworks can hinder growth, and there needs to be a concerted effort between Government, local authorities and industry to work together to overcome these challenges if ambitions are to be met.

While the Government has made positive overtures to industry, all too often amid ongoing conversations around facilitating the development of more homes, boosting productivity and delivering net zero, there is one sector that is overlooked: the street works sector.

Street works, which in its simplest form is the excavation of roads by utility companies, highways authorities and contractors to access cables, pipes and ducts and install new infrastructure, is essential to providing and maintaining critical utilities like gas, water, electricity and telecoms. Approximately four million excavations are carried out by the industry each year.

From connecting essential utilities to new homes, providing broadband connectivity to businesses and supporting the electrification rollout, effective and efficient street works are essential to ensuring the day-to-day economy keeps moving and future ambitions around infrastructure delivery are met.

The sector is working hand-in-glove with industry to deliver economic growth, but it will only be able to realise its full potential if the national policy and regulatory environment in place is not too prohibitive, nor tortuously administrative, and if local authorities – who oversee street work permissions – work in genuine lockstep and partnership with utility companies and their contractors. Siloed working practices within Government have led to delays in rolling out innovative working practices and time and again we see inconsistent approaches from local authorities delay vital works and add unnecessary cost.

While we are seeing genuine signs of progress in fostering productive relationships with local authorities through organisations such as the Highway Authorities and Utilities Committee (HAUC (UK)), it is clear more work is needed at national and local level to build lasting relationships and ensure barriers to growth are removed. We urgently need recognition from national government that putting more pressure or creating more bureaucracy for the sector will only lead to delayed or cancelled works – driving up costs that many utility companies will feel they have no choice but to pass to customers.

This research report, 'The Road to Economic Growth: How street works are delivering economic growth' looks at the Government's priority areas for growth – housing, net zero and productivity – and outlines the crucial role of street works in growing these sectors. The report, which has been informed by our members across the street works industry, details how the sector can work together with Government, local authorities and partners over the next 5-10 years to unlock economic growth and deliver the UK's ambitious infrastructure targets – but only if unnecessary bureaucracy, burdensome administration, and the carrying of risk is removed.

I would like to thank all those who contributed to this report and I look forward to continuing to engage with Street Works UK members, local authorities and policymakers across Government to ensure that our sector continues to deliver the progress needed for a growing economy.



**Clive Bairsto,**Chief Executive Officer,
Street Works UK





## **Getting Britain Building**

The UK is experiencing a well-documented housing shortage, which has led to house prices and rents rising more quickly than wages in recent years.

The situation has been exacerbated by a significant decline (55%) in construction activity in the housing sector, which is in part due to burdensome regulation and planning restrictions.

To help address the housing shortage, the Government has committed to delivering 1.5 million new homes over the next five years, with additional funding announced at the Autumn Budget to boost housing supply. The Government has also committed to creating 'New Towns' of residential buildings and amenities, as well as building on the 'grey belt' – land that is ostensibly in the green belt, but which can often be covered by derelict car parks or old quarries. Green or grey, the utilities required to enable new developments are delivered predominantly through street works in our roads.

At the same time, there are plans in place to make existing homes more energy efficient through the rollout of Government schemes like the 'Warm Homes Plan' and 'Boiler Upgrade Scheme' – with funding recently announced to upgrade up to 300,000 homes with heat pumps, better insulation and smart metering systems.

While these ambitious targets are welcome, it is important to remember that any new build developments will go through the planning process and will need connecting to vital utilities such as water, gas, telecoms and electricity to turn houses into homes. Retrofitting and upgrading properties will also require essential works to get the right infrastructure in place, while building on the grey belt will require extensive work to connect new homes to existing networks.

Utility companies and the street works they undertake are therefore essential to creating good homes for families across the UK, and for upgrading existing homes – ensuring safe, energy efficient and future-proofed housing for all.

A considerable amount of new cabling and piping will need to be installed by the street works sector to service the planned 1.5 million new homes. Here's how the street works sector is getting Britian building:

#### Water

Current estimates suggest the UK will face a shortfall of nearly 5 billion litres of water per day between available water sources and expected demand. To meet this demand, water companies are increasing investment across the UK's water network, with plans to invest nearly £10bn a year over the next five years — rising to more than £15bn a year by 2050.¹ This includes significant investment in our roads by upgrading water delivery infrastructure, creating new reservoirs and national water transfer schemes to support the development of new homes.

#### **Electricity**

Street work operatives working on behalf of Distribution Network Operators (DNOs) maintain approximately 800,000km of distribution cables across the UK and install new cabling and substations to facilitate the connection of new homes to the grid. Currently, new homes can typically take anywhere from 15 working days to 14 weeks to be connected to the electricity grid, or even longer for large developments. To help speed up the delivery of connections, DNOs are investing up to £22bn into the electricity network.

A large proportion of this will go towards facilitating new connections and upgrading infrastructure. DNOs are also working with Government and the regulator Ofgem to reform grid connection processes, which includes strengthening the connection allocation process, accelerating applications that are 'ready to go' and making network planning more coordinated. These reforms and investment will mean that more housing developments will receive a clear connection date, ensuring street works can be delivered in a timely fashion.



#### Gas

Despite the rise of electrification, gas continues to be the most popular fuel for cooking and heating, with over 21 million homes connected to the gas network and nearly 75% of households in England and Wales using gas as their primary source of central heating. It can take approximately 6-8 weeks to carry out works to connect properties to the gas network. New piping is installed by the Gas Distribution Networks (GDNs) each year in order ensure that new developments can receive gas for heating and cooking. The potential use of hydrogen in home heating in the future will require the installation and upgrading of gas network infrastructure to deliver new 'hydrogen homes'.

#### **Telecoms**

Access to high-speed broadband is vital in any new housing development, with around 66 million internet users in the UK in 2023. With promises to deliver gigabit-broadband across the nation and the increased reliance on Wi-Fi — around 75% of time spent on the internet in the UK in 2024 was via a smartphone — the street works sector has a vital role to play to install new cabling and base stations to enable this continued rollout.

"Street works are a vital but often overlooked component of this, enabling the essential utilities and services that keep the UK running.

As we work to deliver new homes, accelerate the transition to net zero, and boost productivity, it is crucial that street works are recognised as enablers of economic growth.

This report highlights how the sector is working to drive efficiency, unlock investment, and support the Government's infrastructure ambitions. I welcome its insights and encourage policymakers to engage with the industry to ensure our infrastructure networks are fit for the future."



Mike Reader
MP for Northampton South,
Chair of the All Party Parliamentary
Group for Infrastructure



## **Boosting Productivity**

The Government's mission to drive economic growth sits against a backdrop of long-standing productivity challenges that have left the UK lagging behind its international competitors.<sup>2</sup>

Geopolitical instability, the Covid-19 pandemic and an ageing workforce have disrupted economic activity and reshaped working patterns across the country.

Today, hybrid working is the norm for around 28% of the UK's workforce, while 13% work entirely from home – a significant increase from the 5% of employees that worked from home in 2019 before the pandemic.<sup>3</sup> The Employment Rights Bill, currently progressing through Parliament, is only expected to accelerate this trend by requiring employers to consider requests for flexible working, including working from home, from an employee's first day, where 'reasonable'.

More broadly, changing customer habits and ways of working are driving an increased reliance on dependable internet access, with 18.3 billion contactless payments made in the UK during 2023 (compared to 17 billion in 2022)<sup>4</sup> and almost all (99%) businesses with at least 10 employers regularly handling digitised data.<sup>5</sup>

To fuel this increased demand for internet access, data and storage, experts predict there will be a significant increase in data centres – which the Government have recently classed as 'Critical National Infrastructure' – across the UK.

In the UK, users only have access to 5G about 10% of the time, and some rural areas are still waiting for 4G.<sup>7</sup> By comparison, users in India have an active 5G connection more than 40% of the time, followed by South Korea at 38%, and European countries such as France and Italy at 20.6% and 17.9% respectively.

Despite a widespread desire to rollout full gigabit capable broadband, there have been several operational, security and logistical setbacks in recent years, with the previous government postponing its target to achieve full coverage by 2025 to 2030. However, with the Autumn Budget committing an additional £500 million for 'Project Gigabit' and the Shared Rural Network – a joint initiative with UK mobile phone operators to invest in new and existing phone masts in rural areas – there is a renewed focus on delivering superfast, reliable internet and mobile phone coverage.

Street works operatives have already – and will continue to – play a vital role in the success of these projects, whether broadband, 4G, 5G or 5G 'backhaul'.





## The Road to Net Zero

The UK has set itself apart by adopting ambitious targets for decarbonisation. We were the first country to legally mandate a reduction in carbon emissions in 2008, and we have committed to achieving Net Zero by 2050.

# The Government has ambitiously pledged to become a 'clean energy superpower' by reducing carbon emissions by 81% by 2035 and delivering a clean electricity grid by 2030.

To deliver net zero, there needs to be greater investment in the UK's energy networks to reinforce existing systems and develop and install new infrastructure. Analysts have predicted that there is a need for investment of between £100-140bn across the electricity grid if the UK is to achieve net zero.<sup>8</sup> And with the potential rollout of hydrogen, further investment will be needed in the UK's gas grid.

Underpinning all of this is the street works sector. Without the critical work undertaken by skilled professionals on Britain's streets, the green energy of the future won't be able to reach the electric vehicles, homes and businesses where it is needed. For instance:

## There are now more than 1 million electric vehicles on our roads – but not enough charge points

- In the Autumn Budget, over £200 million was announced to accelerate the rollout of EV charge points, including funding for local authorities to install on-street charging stations across England. This funding aims to build on the existing 70,000 charge points across the UK to meet ambitious targets of 300,000 points by the end of 2030.
- Street works specialists will be indispensable in achieving this goal and will work closely with local authorities to plan curb-side installations and minimise disruption to road users.

## Home heating accounts for the majority of domestic energy use in the UK

- To tackle this and boost decarbonisation efforts, all new homes in England from 2027 will have to use electric heat pumps or other non-gas sources of heating.
- Government plans to increase annual heat pump installations to 600,000 – from 55,000 in 2021 – which will require significant expansion of electricity delivery to homes.

- The Government's 'Warm Homes: Local Grant' fund will be made available in 2025 and will include grants for energy performance upgrades and low carbon heating for low-income households. Measures could include the installation of solar panels and heat pumps.
- This will require significant street works to connect homes to the electricity they will need to run new heat pumps as well as facilitate access to innovative heat networks.

#### Reducing fossil fuel reliance across industry

- As the Prime Minister stated in Autumn 2024, "decarbonisation does not mean de-industrialisation".
   Across industries like manufacturing, efforts are being made to electrify as many energy-intense processes as possible as well as exploring the role of hydrogen.
- Government is providing support for these transitions through vehicles like the Industrial Energy Transformation Fund and the Net Zero Innovation Portfolio.
- As with home heating and EV charging, converting fossilfuel reliant industrial sites into green workplaces will require extensive street works and grid expansion.
   Doing so without disrupting crucial industries driving the UK's economy will require significant expertise.

#### Transitioning to a smart, flexible energy system

- With the increased use of smart energy management systems and flexibility services, there is a need for an increase in data and communication infrastructure.
- The ongoing move towards connectivity of assets through initiatives such as the 'internet of things' is increasing the needed for upgraded, high speed broadband.

From just these four examples, we can see that the street works sector will be critical to enabling the decarbonisation of broad swathes of the economy – with innovative ways of working key to avoid excessive disruption to families, businesses, and communities.

#### The Road to Net Zero continued







## Case Study: Virgin Media 02

The Shared Rural Network is a joint initiative between the Government and the four mobile network operators to extend 4G connectivity to 95% of the UK by 2025. Virgin Media O2 (VMO2) has built more shared sites than any other operator, improving mobile coverage in 227 areas across the UK and delivering reliable 4G service in 300 former coverage black spots.

They are also expanding their ultrafast network as part of a £4.5bn investment to deliver high speed fibre to the home (FTTH) connections to 5 million homes across the UK by 2026.





The street and road works sector is committed to reducing its carbon footprint as we carry out works, through expanding our use of technology and adjusting working practices. The Road to Net Zero project is seeking to reduce the sector's CO<sub>2</sub> emissions by identifying and promoting alternative design methods and construction practices.

Currently in the 'Delivery Phase', the project has developed a bespoke methodology for estimating sector emissions and is steering the street works and road works industry towards a more sustainable ethos.



## **Driving efficiencies**

Spanning all the pressing policy priorities addressed in this report so far – achieving Net Zero, building more houses, and reviving sluggish productivity – is the need to ensure our utility network is efficient and reliable. Economic growth will simply not be possible if valuable resources are wasted, or people cannot access the services they need.

Issues with the UK's existing utility infrastructure framework are well documented: old pipes leaking water and sewage onto our streets and coastlines, burst gas pipes, and electricity restrictions at times of high demand. These issues are set to become more problematic over the coming decades, with water an increasingly precious resource and the projected surge in demand for electricity for homes, businesses, and transport.

In the latest data from 2021, almost 3,000 gas leaks were reported, an increase of 17% year on year and costing around £100 million to fix — most of this cost is passed directly, through regulatory allowances, to consumers. Despite industry-wide efforts to improve infrastructure, leaky pipes led to 19% of water in supply being wasted in 2023, potentially costing up to £697 million. And Britain's electricity grid 'leaks' twice as much electricity as it imports from abroad, with estimates suggesting we waste 26,412 GWh annually — enough to power approximately 7 million households.

To drive efficiencies across the sector, the Government is taking a carrot and stick approach. On the one hand, the newly created National Infrastructure and Service Transformation Authority (NISTA) will help address delays and drive efficiency in delivering essential infrastructure. On the other hand, the Government has pledged to impose tougher regulation on the energy market if rapid action is not taken to address issues like gas leaks, while regulators such as Ofgem are also looking to introduce measures to encourage the driving of efficiencies across energy networks.

Whether it is excavating roads to access and upgrade existing pipes, ducts and cables, or targeting specific areas to install energy saving measures such as smart water or electricity meters (estimates suggest if all homes installed a smart meter, water usage could be reduced by 17%), the street works sector will be crucial to the operational delivery of significant network upgrades and driving efficiencies.



# The street works sector also has a role to play in driving efficiencies and reducing disruption whilst carrying out crucial works.

The sector is constantly developing and adopting new ways to undertake works more efficiently, such as expanding trench sharing schemes where multiple utility providers collaborate to install or repair infrastructure in a single trench, rather than conducting separate projects.

Utility companies are also working closely with the Government to support the development of the National Underground Asset Register (NUAR), a digital platform designed to map the UK's underground assets—pipes, cables, and other infrastructure components — which reduces delays and safety risks in underground street works operations.

By playing its part in driving efficient ways of working across the utilities sector, the street works industry can drive down emissions and costs as it supports the nation to develop and install future-proofed, low-carbon infrastructure and utilities.



## **Unlocking Growth**

As our report has outlined, the street works sector is vital to growing the UK economy, delivering the Government's ambitious targets for decarbonisation, housing and unlocking opportunity for all.

However, the sector is facing some pressing challenges which risk impacting delivery, complicating or delaying vital work and ultimately making it more difficult for utility companies to operate.

Greater consistency and collaboration is needed between highway authorities, central government and utility companies, and there needs to be greater recognition from authorities that increased costs or bureaucracy will put undue pressure on utility companies — which could hinder growth, put workers at risk, and ultimately lead to more costly bills.

As the trade association representing the street works sector, here we outline the simple actions that can be taken by Government and local authorities to maximise the contribution of the street works sector and ensure there's no delay delivering projects that will unlock our nation's potential.

## 1.

#### **Closer collaboration**

#### Our concern:

It is vital that highways authorities and the street works sector work in lockstep to deliver works as efficiently and effectively as possible. While the utility sector and relevant authorities already have a conducive relationship, we want to see even closer collaboration.

This is particularly important given the calls for the expansion of Lane Rental Schemes, which enable authorities to charge companies carrying out works a daily fee for occupying the busiest roads during peak hours, with the aim of speeding up works and minimising disruption to road users. We are concerned that the current proposals are too focused on minimising disruption, potentially compromising street work quality and standards, and in turn increasing costs and operational challenges.

These proposals will have unintended consequences on utility repairs and could result in errant prioritisation, leading to delays to works, adding costs to the consumer and impacting safety. Utilities must be fixed when needed and have a shared interest with highways authorities in getting 'in and out' quickly and efficiently.

#### **Our recommendation:**

Currently, there is too much variation across the country in how Lane Rental is applied, which leads to confusion and sometimes punitive fees which raise costs for utilities and hinder their ability to invest and deliver works. Lane Rental Schemes need to be designed and implemented in a way that does not disproportionately impact utility companies. There must be a consistent approach in terms of charges and application. Consistency and collaboration are key.

## 2.

#### **Greater flexibility**

#### Our concern:

It is important that as the need for infrastructure grows, street work operatives can operate in an environment that encourages flexibility and innovation in delivering works. Flexi-permits can help speed up works and allow for efficiencies to be delivered by providing one work permit to cover several minor and standard works, in a specified area, containing multiple streets, for a limited period. Trials have shown that the use of flexi-permits can deliver for communities and avoid congestion for road users.

#### **Our recommendation:**

Under trial, a small number of Flexi Permits were issued in 2024. However, we want to see them used more frequently. We want the Government to accelerate the roll-out of flexi-permits to ensure that new infrastructure developments and upgrades to the existing network can be delivered quickly and efficiently.



By continuing to work together with highways authorities and Government, the street works sector will address the challenges behind infrastructure delivery and help to deliver economic growth.

3.

#### **Cohesive regulation**

#### Our concern:

The devolution of traffic and transport means local authorities are in control of Temporary Traffic Regulation Orders (TTROs). Different approaches to TTROs create an extra layer of complexity for utility companies, especially for last-minute or emergency works.

Similarly, while we understand there are plans to allow authorities to increase Fixed Penalty Notice (FPN) charges to incentivise compliance, we're concerned the current guidance allows too much latitude, potentially leading to FPNs being awarded for plainly very minor errors and increasing the burden on utility companies.

#### **Our recommendation:**

We want the Department for Transport to issue clearer guidance for FPNs for street works to prevent unnecessary penalties. Without improved guidance, increased FPNs will raise costs for utility companies and consumers and hinder the ability of utility companies to invest in and deliver infrastructure improvements, without significantly improving compliance. A lack of consistency could potentially undermine government objectives around network investment and economic growth. A uniform approach to TTROs across authorities will also help ease the administrative burden on utility companies.

4.

#### Effective use of data

#### Our concern:

Data is a vital tool in ensuring that street works are delivered in a safe and efficient manner. Utility companies are developing new ways to share and process data so that work is carried out safely, reducing the risk of potentially dangerous utility strikes.

The street works sector is excited about the potential for the NUAR, which could transform the way works are

planned and help protect our workers. But there has been a lack of consultation with the sector to date, and we urge further discussion and clarity on its implementation. There is currently ambiguity over who will be able to use the service and how up-to-date and thorough the dataset will be.

#### **Our recommendation:**

The Government needs to consult much more closely with the industry before mandating NUAR use across the street works sector. Failure to address concerns from industry could increase the risk of utility strikes, endangering workers and the public.

**5**.

#### Keeping works at pace

#### Our concern:

Our members deliver street works to a high standard - after two years, 90% of all work undertaken in the UK passes all inspections. However, the Government has been proposing changes to the Specification for the Reinstatement of Openings in Highways (SROH) to lengthen the two-year guarantee period. We believe that this is unnecessary. Road quality continues to deteriorate across the UK and utility companies are not the sole cause of deteriorating road surfaces. It is acknowledged that local highway authorities across the UK are experiencing financial constraints that are impacting their ability to maintain roads effectively, impacting road and pavement surface quality. Lengthening the two-year quarantee period puts the utility sector at risk of increased costs and administrative burdens which will impact their ability to invest and deliver much needed works.

#### **Our recommendation:**

The current two-year guarantee period should be maintained to minimise protracted legal challenges and costs, ensuring that utility companies can focus on the delivery of infrastructure which is vital for economic growth.



