# London’s digital infrastructure lags behind as New London Plan offers chance to boost 5G performance



London faces a pivotal moment in shaping its digital future, with mobile connectivity at the heart of its ambitions for economic growth and social welfare. Mobile UK, an industry body, has underlined in its response to the New London Plan that this forthcoming national framework presents a prime opportunity to embed robust mobile infrastructure crucial to maintaining the city’s economic dominance. London accounts for more than 20% of the UK’s economy, generating £531 billion in output in 2023, a stature that hinges heavily on leading digital connectivity. Yet, despite repeated acknowledgments by the Mayor’s office—most notably in the London Growth Plan published earlier this year—London's 5G service metrics reveal a troubling lag. The city’s median 5G download speed barely exceeds 115 Mbps, trailing well behind cities like Glasgow, which boasts nearly 185 Mbps, and London’s 5G quality ranks 10th out of 14 major European cities with a reliability score hovering at 75.73%, starkly lower than Stockholm’s top score of 95.78%.

This underperformance contrasts sharply with London’s image as a global economic powerhouse and signals a missed opportunity in prior planning frameworks. The previous London Plan fell short in addressing the complex challenges of mobile infrastructure deployment amid the city’s dense and dynamic urban environment. The capital’s unique challenges—such as legal hurdles related to rooftop access critical for antenna installation, a prevalence of Notices to Quit displacing nearly 7% of key sites, and a plethora of tall building developments—combine to obstruct smooth, scalable rollout of 5G networks. London boroughs exhibit widely varying and often prohibitively high fees for planning applications, pricing infrastructure development out of reach and complicating coordination efforts.

In addition, the National Planning Policy Framework, while influential, lacks the specificity to tackle London's distinct infrastructural and policy needs, necessitating a bespoke, London-centric approach rather than deferral to national guidelines. The Mayor and Greater London Authority are called upon to take a proactive role in harmonising planning processes, boosting broadband coverage, and developing a pan-London infrastructure strategy. Without a strong, clear policy framework centred on digital connectivity, these structural and regulatory challenges risk allowing London’s digital infrastructure to fall further behind, with consequences for its global competitiveness and economic health.

The urgency of bolstering London’s digital infrastructure is underscored by broader economic concerns. Recent analyses have shown that London’s labour productivity has declined since 2019 by an average of 0.3% annually, failing to rebound to pre-pandemic levels and underperforming against the UK’s overall productivity growth of 0.7%. Contributing factors include a weakened financial sector post-2008, difficulties attracting talent due to high living costs and tighter immigration post-Brexit, and disruptions caused by remote working trends and transport issues. This economic stagnation in London risks broader national consequences, given the city’s outsized contribution to the UK economy. The patchy recovery of London’s economic output post-pandemic further complicates the picture, with recent data showing the city’s output remaining below 2019 levels despite early growth following the crisis.

Beyond economic growth alone, London’s digital connectivity challenges have tangible impacts on daily life and business competitiveness. A detailed review by network analysts reveals that London not only exhibits some of the slowest 5G speeds among major UK cities but also significant inconsistency in network quality—the mobile user experience is frequently disrupted by poor signal reliability. This undermines productivity and the quality of services that citizens and businesses rely on. While improvements in coverage have reduced the number of mobile "not-spots" in the city, particularly in the London Underground and key transit routes, London’s 5G performance remains behind smaller cities such as Sheffield and Cardiff. Legal disputes over site access, regulatory complexities, and spectrum limitations exacerbate these issues, making the deployment of essential small cell infrastructure slower and more costly.

Nevertheless, incremental progress is being made. Operators have invested in network densification and improved transit coverage, leading to a reduction in areas where no signal is available. London now leads UK cities in 5G availability, reflecting an expansion in network reach. However, this increased availability has not yet translated into consistently high-speed and high-quality connections, a gap that must be addressed through policy reform and infrastructure investment.

Ultimately, the New London Plan represents a crucial opportunity to establish a coherent and ambitious strategy for London’s digital infrastructure, one that can match the capital’s economic weight and global status. Industry leaders have expressed readiness to invest but stress the necessity of a clear, supportive, and streamlined framework to enable swift deployment of mobile networks. Without decisive action, London risks ceding its competitive edge in an increasingly digital world, undermining its ability to attract talent, foster innovation, and maintain economic vitality.

### 📌 Reference Map:

* Paragraph 1 – [[1]](https://www.politicshome.com/members/article/londons-digital-future-critical-juncture-mobile-infrastructure-new-london-plan), [[5]](https://www.broadbandanalyst.co.uk/articles/ookla-5g-performance-report-uk-cities/), [[6]](https://www.ispreview.co.uk/index.php/2025/04/ookla-study-finds-london-5g-mobile-performance-lags-behind-other-uk-cities.html)
* Paragraph 2 – [[1]](https://www.politicshome.com/members/article/londons-digital-future-critical-juncture-mobile-infrastructure-new-london-plan), [[5]](https://www.broadbandanalyst.co.uk/articles/ookla-5g-performance-report-uk-cities/)
* Paragraph 3 – [[1]](https://www.politicshome.com/members/article/londons-digital-future-critical-juncture-mobile-infrastructure-new-london-plan), [[5]](https://www.broadbandanalyst.co.uk/articles/ookla-5g-performance-report-uk-cities/)
* Paragraph 4 – [[2]](https://www.ft.com/content/ec45e6c7-6e77-4126-bdcc-f97e763f930e), [[3]](https://www.ft.com/content/cfc44944-ea8c-4c3d-a64c-b1e5f4141832), [[4]](https://www.ft.com/content/968b0b88-c5b5-4044-bdfb-6fac207652c1)
* Paragraph 5 – [[1]](https://www.politicshome.com/members/article/londons-digital-future-critical-juncture-mobile-infrastructure-new-london-plan), [[5]](https://www.broadbandanalyst.co.uk/articles/ookla-5g-performance-report-uk-cities/), [[6]](https://www.ispreview.co.uk/index.php/2025/04/ookla-study-finds-london-5g-mobile-performance-lags-behind-other-uk-cities.html)

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.politicshome.com/members/article/londons-digital-future-critical-juncture-mobile-infrastructure-new-london-plan> - Please view link - unable to able to access data
2. <https://www.ft.com/content/ec45e6c7-6e77-4126-bdcc-f97e763f930e> - In 2023, London's labour productivity fell below pre-pandemic levels, declining by an average annual rate of 0.3% between 2019 and 2023. This contrasts with the UK's overall productivity rise of 0.7% annually. Economists attribute the decline to factors such as reduced financial sector performance post-2008, difficulties in talent acquisition due to high housing costs and post-Brexit migration changes, and underinvestment in high-growth areas. The pandemic's aftermath, including the rise of remote work and transportation disruptions, also likely contributed. As London remains the UK’s economic powerhouse, its stagnating productivity poses broader risks to national growth, prompting calls for the upcoming industrial strategy to address these challenges.
3. <https://www.ft.com/content/cfc44944-ea8c-4c3d-a64c-b1e5f4141832> - Since the pandemic, London's economic performance relative to other UK regions has fluctuated based on shifting data. Initially heralded as the leader of the UK's economic recovery, recent statistics now position London as underperforming compared to the nation. This pivot highlights the impact of the UK's ongoing data revisions, which recently recontextualized the country's post-pandemic recovery. Though London's economy showed significant growth shortly after the pandemic, current data indicates that by 2022, output was still below pre-pandemic levels, contrasting with the overall UK growth. The pandemic's uneven impact across London, particularly in areas dependent on transport hubs like Heathrow, has contributed to the city's mixed economic recovery. These changes come amid an election year where economic narratives play a crucial role. The uncertainty and ongoing revisions in the data underscore a muddled economic picture for both London and the broader UK.
4. <https://www.ft.com/content/968b0b88-c5b5-4044-bdfb-6fac207652c1> - In the past 15 years, London has faced significant challenges, including stagnating productivity post-financial crisis, Brexit's blow to its trade launch pad status, and a rise in remote working reducing office usage. Despite these setbacks, London has shown resilience due to its diverse talent pool, industry clusters, and favorable time zone. The city maintained strong foreign investment in its financial sector and a projected population growth. However, London's growth is constrained by limited space, high living costs, and competitive pressures from cities like New York and Singapore. Policies limiting immigration and proposed higher taxes could deter talent. Enhancing growth requires expanding commuter hubs, efficient land use, sectoral ties with the EU, and competitive visa processes. London's future growth depends on national strategies and collaboration between the government and Mayor Sadiq Khan, addressing factors like regulation, transport, and tax policies, to ensure London remains a vital economic hub.
5. <https://www.broadbandanalyst.co.uk/articles/ookla-5g-performance-report-uk-cities/> - London may be the UK’s capital, but when it comes to 5G mobile performance, it continues to fall behind. A new analysis from Ookla, the network benchmarking company behind Speedtest.net, reveals that London ranks at the bottom of 5G performance tables among 11 major UK cities. Despite improvements in coverage and availability, the capital lags in key metrics like download speeds, consistency, and signal accessibility—a surprising result for a city with global infrastructure ambitions. Using crowdsourced data from Speedtest apps in Q1 2025, Ookla compared 5G performance across cities including London, Glasgow, Manchester, Leeds, and Birmingham. The study focused on median 5G download and upload speeds, network consistency, and coverage availability—all critical indicators of the mobile user experience. Benchmarking mobile performance comes with challenges: user mobility, environmental obstructions, building materials, and the range of devices in use can all affect signal strength and speed. Despite these variables, the volume of data collected allows for meaningful city-level comparisons. The result: London remains one of the worst-performing cities for 5G, outpaced even by smaller urban centres like Sheffield and Cardiff. London’s median 5G download speed was just 115.08 Mbps—the second-lowest among all cities in the report. In contrast, Glasgow topped the list with 184.99 Mbps, while Birmingham and Liverpool both delivered over 140 Mbps. In addition to slower speeds, London also performed poorly in network consistency—a measure of how often users enjoy stable, usable speeds across typical mobile activities like browsing, streaming, and calling. For a capital city with heavy demand for connectivity, this result highlights an ongoing issue: 5G in London is available more often, but doesn’t deliver consistently high performance. Several interlinked factors continue to hamper London’s 5G rollout and reliability: Rooftop Access Delays: In dense urban areas like London, mobile operators rely heavily on rooftop sites to install 5G antennas. However, securing rooftop leases remains complex and slow due to property ownership disputes and long approval times. Building Design Barriers: Modern buildings often use materials that insulate heat and block radio signals—making indoor coverage harder to deliver. High-rise buildings with metal cladding, reinforced concrete, and energy-efficient windows can severely restrict signal penetration. Legal and Regulatory Obstacles: Reforms to the Electronic Communications Code in 2017 were meant to simplify site access. However, in practice, these changes have triggered legal disputes between property owners and telecom operators—slowing the deployment of new masts, especially in city centres. Spectrum Limitations: London’s networks rely heavily on the 3.5 GHz frequency band, which provides high capacity but struggles with indoor penetration and wide-area coverage. Without sufficient small cell deployment, this spectrum’s performance in London remains sub-optimal. Despite lagging performance, there are signs of improvement. Londoners are spending less time in mobile “not-spots”—areas where no signal is available. In Q1 2023, around 3.7% of users were frequently without a signal. By Q1 2025, that figure had dropped to 0.7%. This improvement is largely credited to investment in small cell infrastructure and efforts to expand mobile coverage across the London Underground and other key transit routes. Operator investment is helping to plug some of the more persistent coverage gaps, particularly in high-density areas and indoor locations. Despite these efforts, London still lags behind other UK cities in 5G performance. For London to catch up, it needs continued investment in small cells, greater rooftop access, and updated planning frameworks that support telecom infrastructure as a critical part of the city’s digital future. Without that, even the most connected city risks falling further behind.
6. <https://www.ispreview.co.uk/index.php/2025/04/ookla-study-finds-london-5g-mobile-performance-lags-behind-other-uk-cities.html> - Mobile users in London were also found to be spending more time in signal not-spots with no service than residents of other UK cities, reflecting “lingering coverage gaps indoors and across key transport routes“. The proportion of Londoners spending the majority of their time in locations with no service has, however, improved significantly due to operators investing in network densification through small cells and upgrades to transport links (e.g. London Underground). Time spent on 2G networks increased across several UK cities over the last year, including Birmingham and Manchester, as the advancement of the 3G sunset in the UK contributed to greater propensity for 2G fallback. However, the gap in 5G availability between the UK’s major cities and the national average has significantly narrowed over the past year. For example, Leeds led UK cities in 5G availability, with a 21 percentage point gap above the national average. By Q1 2025, London had taken the lead in 5G availability among major UK cities, and that gap above the national average had narrowed to 13 percentage points. This trend reflects progress in 5G network expansion in smaller UK towns and rural areas in recent months, which has moved at a faster pace than coverage improvements in larger cities. But sadly we don’t get a more detailed summary of 5G availability across the listed cities, which would have been helpful.