



The Future of Cities

Adapting to changing behaviour and ongoing trends

January 2025

A WPI Economics Report for Network Rail

About Network Rail

Network Rail owns, operates, maintains and develops the railway infrastructure in England, Scotland and Wales. That's 20,000 miles of track, 30,000 bridges, tunnels and viaducts and the thousands of signals, level crossings and stations. Network Rail manages 20 of the country's largest stations, while all the rest – over 2,500 – are run by the train operating companies.

Network Rail's purpose is to connect people and goods with where they need to be, to support the country's economic prosperity and contribute to the objectives of the UK and Scottish Governments. Its role is to run a safe, reliable and efficient rail network with a vision to deliver a simpler, better, greener railway for customers and communities.

About WPI Economics

Founded in 2016, WPI Economics makes an impact through economics that people understand, policy consulting and data insight. We work with a range of organisations - from FTSE 100 companies to SMEs, charities, central and local government - to help them influence and deliver better outcomes through improved public policy design and delivery.

We focus on important social, environmental and economic policy debates, such as the future of the green economy, productivity and growth, levelling up, and mental health. We are driven by a desire to make a difference, both through the work we do and by taking seriously our responsibilities as a business. We are a Living Wage Employer, and we were recently certified B Corporation.



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Foreword

Cities are the powerhouses of economic growth. In the UK, while accounting for just 9% of the land, cities are home to 55% of businesses, 70% of the most productive jobs and account for 63% of economic output. Over the last two decades, people and economic activity have increasingly moved to urban areas, driven by the longer-term shift in our economy towards a highly developed service sector relying on knowledge-based jobs. The combination of these longer-term changes, along with the sharp shock of the pandemic, reveals new trends and challenges that all sectors must understand in order to adapt.



Network Rail has undertaken this work with WPI Economics to look more broadly across the different sectors and services that rely on successful cities. The digital transformation of work over recent decades and the burgeoning AI revolution present opportunities for greater productivity in many areas. Yet dense city centres, with an agglomeration of sectors, create microcosms of our national economy and support productivity, employment growth, creativity and innovation in a way that the evidence shows cannot be fully replicated through virtual encounters.

In a situation where productivity is already constrained in many cities, particularly outside of London, rail can support cities' growth through the new and changing reality they face. Rail's core offer is the ability to transport high volumes of passengers at speed within and between urban areas, and high volumes of freight between ports and markets, at low cost and with low emissions. While electric road vehicles will reduce the UK's emissions, they won't transform the speed of journeys on congested city streets or on the motorways.

Fundamentally, rail is an enabler of economic and social activity well beyond its direct financial returns. We must ensure our long-term plans secure growth and productivity, support national net-zero targets and provide the high-quality services people, businesses and cities require. That requires us to look beyond the indicators we have on passenger markets and travel patterns to build a richer understanding of how our economy is evolving by region and by sector. In today's fiscal environment we must make the best use of the investment we have. This deeper insight allows us to better target funding to meet future needs, driving revenue growth to ease the call on taxpayers.

I am confident we will adapt to meet the changing needs of 21st century cities. From the industrial revolution to today's AI breakthroughs, the railway has shaped the landscape and economies of our cities while evolving to meet the changing needs of the nation. The reforms underway to bring the leadership of train services and infrastructure together under Great British Railways remove significant constraints in addressing rail's long-term strategic challenges, allowing greater financial sustainability and better performance for our users.

GBR will enable us to closely collaborate with city leaders to devolve decision-making and help unlock the productivity and growth potential of our regional cities. £47 billion more a year could be unlocked for the national economy if the eight largest cities outside of London met their productivity potential. Devolution as an integral part of rail reform can help make this a reality.

I would like to thank all those people and organisations who have contributed to this research and extend an invitation to all those with an interest in growth to build on this work. The more we understand about the changing dynamics of our cities, the better able we are to adapt and thrive.

Sir Andrew Haines, Chief Executive, Network Rail

Executive summary

Network Rail commissioned this work to consider the key trends that will influence the future of British cities and shape the country’s productivity into the future. 2025 offers a moment to reflect on the impact of the pandemic, the way people now interact with cities, the benefits that persist and how the role of cities might develop in the future.

The baseline is a picture of British cities with less commuter travel, but where people who have a choice in where to work have increasingly shifted back to a hybrid pattern rather than a fully remote one. It is one with higher volumes of leisure visits, but more thought behind each trip and more of a focus on value and affordability. This report considers these shifts in the international context, as well as looking at how these changing patterns of behaviour will affect:

- the future interconnectedness of cities;
- mobility in the labour market;
- the pattern of work and how this shapes productivity;
- the growth of the experiential economy; and
- the path to net zero.

We sought to understand how trends that predated the pandemic had continued, accelerated or decelerated and which new ones had entered the picture. We shortlisted an original 16 themes to a focused set of five, dividing these into three central ones: Commuter City; Knowledge City; and Productive Regional City; and two supporting themes: Sustainable City; and Leisure City. For the central trends, we found:

Commuter City:	<ul style="list-style-type: none"> • The commuter city persists, but people come in less frequently and want better experiences at work when they do. • There remains a high degree of variability in current and future demand for office space, with a continued ‘flight to quality’ across the UK. • The change in commuter patterns also changes the services on offer, which has knock on effects for the shape of the leisure city.
Knowledge City:	<ul style="list-style-type: none"> • Improved digital technology and increased familiarity with home working has not driven a permanent move to only working from home. • Dynamic agglomeration benefits persist in cities and have not been fully replicated digitally; something that is unlikely to change in the next few years. • As workplaces allow for ideas to be exchanged within companies, cities will continue to allow for the exchange of ideas between companies and sectors.
Productive Regional City:	<ul style="list-style-type: none"> • The benefits of agglomeration continue to be felt less in larger cities in the north than in smaller cities in the south. • Productivity in regional cities is likely to remain a priority: an additional £47 billion per year would be generated for the economy if the eight largest cities outside London met their productivity potential. • Achieving this will require denser cities with further investment in rail infrastructure to increase the agglomeration effects that attract businesses and workers in knowledge-based, high-productivity sectors.

All these shifts – combined with those driven by sustainability and leisure – will have consequences for how British cities evolve. Each underlines opportunities, as well as challenges, that lie ahead.

Key context – the pandemic, remote working and the shape of cities

Cities across the globe were significantly impacted by the pandemic. Once the initial health crisis started to subside, questions were immediately asked about the shape of the new normal. Some of this centred on how people would travel in and out of cities in the future, but much of the discussion went beyond to more fundamental shifts in what a city is **for**. However, not all of these shifts were new – many were a continuation of changing behaviour that was visible well before 2020.

That is the context in which this report was commissioned by Network Rail. 2025 offers a moment to take stock of the key trends that were emerging before the pandemic – such as the (then slow) growth of remote working and the shift to online retail – and newer shifts that have cemented themselves since, such as the growing role of leisure as a driver for city visits. Much has been written about which trends were accelerated, decelerated or unaffected by the pandemic – but the story is not yet over. To explore where things stand now, we focused on five themes (detailed in the next section) and explored with a range of businesses, sector representatives and others how these might shape British cities into the future.

At the heart of each of these themes are changing patterns of behaviour. It was recently reported that Zoom had hit around 300 million users a day, from a baseline of closer to 10 million in 2019.¹ This speaks to the huge growth in remote working, which has stayed with many economies since 2020. However, it is important to bear in mind that, in the 2021 UK Census, 49% of people did not work from home. Beyond the commuter picture, there is also a shift in what people are travelling **for**: the usage of cities is changing, with many more leisure visits, seemingly more thought behind each trip and a greater focus on affordability.

While this report focuses on the UK, similar conversations have been underway in other cities across the globe as we head to a new normal post-pandemic. This has been particularly visible in the US, with cities such as San Francisco seeing major shifts in commuter patterns, reductions in commuter travel overall and lower public transport revenues as a result. However, in Germany and Spain, commuter travel is now only slightly below pre-pandemic levels: 3% and 5% below, respectively. In France, the volume of commuter travel is now greater than before the pandemic, a trend that has continued despite significant disruption. Differences in geography, labour market structure, cultural attitudes towards hybrid working and different subsidies explain much of these differences. Meanwhile, in France and Germany leisure travel increased by 15% and 10% respectively compared to the pre-pandemic baseline.²

The way people across the globe are using cities is changing, and it is in this context that we selected our themes for further exploration as detailed in the next section. Within each of them, there remain questions around the future interconnectedness of cities, mobility in the labour market, the nature of long-term remote working, the growth of the experiential economy and the path to net zero. The next sections of this report investigate how these shifts are likely to shape the UK cities of the future.

CHAPTER 2

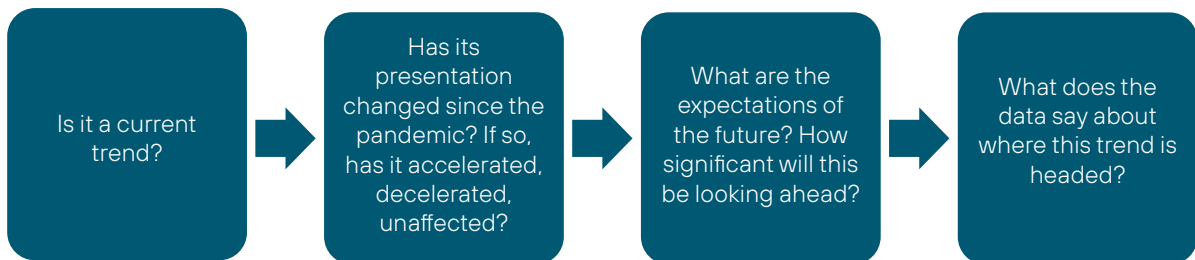
The Future of Cities – finding our themes

The uncertainty of the pandemic brought significant disruption to established patterns of behaviour, to the use of cities, and to the cultural understanding of what a city is and what it is for. These changes have significant implications for sectors with the biggest stake in the future of cities, including the hospitality, business, transport, housing and property sectors. To start to look further ahead, we wanted to identify a number of key trends to understand how these have shifted post-pandemic – whether they have been accelerated, decelerated, or reversed – and what that means for urban spaces and the people who live in them.

In deciding on the themes, we started by casting the net wide and considering a range of issues and trends from key sectors that are shaping the future of cities, from logistics and housing through to re-shoring. We also pulled in themes which were already a significant focus of interest prior to the pandemic to test and understand how events since then had shifted the focus on them. We started with 16 themes:



For each of these themes, we then asked the following questions:



From this analysis, and in discussion with Network Rail, we identified three central themes and two supporting ones which overlay and influence the others:

Central themes:

- **Commuter City:** The rapid shift to remote working during the pandemic changed how people interact with their workplace, how they commute, and their impact on local communities. Is this permanent and, if it is, what does it mean for the appearance, culture, infrastructure and purpose of the city?
- **Knowledge City (bringing in the Productive City):** As information sharing, education and training shifts online and remote working is more widely adopted, cities' role in knowledge and skills clustering is undergoing some change. As companies gain access to a significantly wider talent pool through remote connectivity, will the demand for clustered labour markets remain?
- **Productive Regional City:** Varied levels of investment in - and support for - cities across the country means that the productivity, economic and wellbeing benefits of cities are not consistently achieved. What would a future with optimally productive regional cities look like, not just through the investment into individual cities but through the benefits of agglomeration?

Supporting themes:

- **Sustainable City:** The sustainability and resilience of cities is continuing to become more relevant with each passing year. Large-scale weather events, shifting climate regulations, new and consumer expectations and new technologies will all drive changes in how our cities look and operate. How will cities adapt to these changing requirements?
- **Leisure City:** as the purpose of cities shifts and changes away from labour and skills, other activities are gaining prominence - leisure travel has more than recovered its pre-pandemic levels. Could cities' purpose shift towards a central meeting point to connect with your community and engage in leisure, arts, sports, culture and entertainment?

Our selected themes were then assessed against the key research questions outlined above to develop a big picture understanding of where the theme is now, how it has been impacted by the pandemic (if it has), what we expect the impact on the future of cities to be, and what this could mean for the future of the rail network. We conducted an extensive review of the evidence available on each of these trends, and built on it with key stakeholders across a series of structured interview deep dives into their views on the key themes. We gathered stakeholders in a roundtable discussion to test the key ideas that were emerging, and to tease out the areas of agreement and contradiction across the stakeholder group. The interviewees were selected from the sectors we considered to have the biggest stake in the future of cities, and the biggest opportunity to shape that future, namely: business; property; hospitality; transport; and services. The ideas, quotes and examples provided by this stakeholder engagement support our analysis throughout this report.

All the themes have fundamental implications for the purpose of cities, and differing consequences and requirements for the sectors striving to adapt to the shifting sands.



The Commuter City

Three key takeaways for the future:

The commuter city persists, but people come in less frequently and want better experiences at work when they do.

There remains a high degree of variability in current and future demand for office space, with a continued 'flight to quality'.

The change in commuter patterns also changes the services on offer, which has knock-on effects for the shape of the leisure city.

Before the pandemic, the daily commute was a permanent and largely non-negotiable fixture of the lives of the majority of workers in cities across the UK. This constant and highly predictable commuter churn was central to the design and development of cities: public transport services and road infrastructure prioritised the mass transportation of workers during rush hour; offices and businesses were concentrated in city centres; city centres were flooded with eateries to serve office workers on their lunch break; and the value of real estate was largely determined by proximity to city centres and public transport links.

Rise of hybrid working

The pandemic was an immediate shock that forced an unprecedented rise in remote working and an effective stop to commuter travel, as well as other types of essential and leisure travel. The end of the pandemic and easing of social restrictions led to a rapid bounce back in the volume of rail passenger travel in most cities, with weekend leisure travel now exceeding the pre-pandemic level and nighttime and weekday leisure travel also recovering strongly, albeit at a slower pace. The exception to this rule is rail commuter travel, which has been fundamentally altered by the shift towards hybrid working for those who can make a choice.

The result of this wide spread and ongoing change is that the volume of total rail commuter travel in Great Britain is still hovering around two-thirds of its 2019 levels. By comparison, total relative rail use is back at 97%, including the Elizabeth Line, and 83% without it.³ The largest fall in self-reported surveys of commuter travel by rail was seen in London, where in 2022 '[r]ail and London Underground trips were around a quarter below pre-pandemic levels'.⁴ Relative to smaller regional and sub-regional cities, workers in office-based occupations make up a much larger share of the workforce in larger cities given the high concentration of jobs in knowledge industries and professional services. This is important since office workers are around two times more likely to have the opportunity to work remotely or on a hybrid basis, compared to those working in more manual occupations.⁵

The geographical divergence in the volume and patterns of post-pandemic commuter travel emerged as an important theme at our stakeholder roundtable. In particular, participants emphasised that the decline in the number of rail commuters appears to have been less pronounced in most smaller cities, yet the positive impact of this wider bounce back has been largely masked given that these regional commuter journeys make up a relatively small share of all commuter travel.

Looking forward, existing data and business sentiment suggests that this new hybrid model of working represents a permanent change, even if exact patterns may continue to shift. In 2023, 44% of all workers in Great Britain reported home or hybrid working.⁶ Among home workers, some of the most common benefits reported include 'improved work-life balance', 'quicker to complete work' and 'improved wellbeing'. Moreover, 42% of workers would consider quitting or looking for another job if their employer expected them to return to the office full-time.⁷ To quote Ian Wright from Transport Focus, '[t]he genie is out of the bottle now with respect to [...] work-life balance'. And the upshot is that 'the offer of flexible working will remain an important incentive that employers offer to get the best workers'.⁸ While it is clear that neither employers nor workers want to leave the office completely – something explored in more detail in the next chapter – the overriding sentiment is that the rise of hybrid working is a 'fundamental and permanent shift in working patterns and environment'.⁹

Implications for cities going forward

This fall in commuter travel has implications for the provision of public transport, as well as wider effects on the commercial and residential makeup of cities. The most immediate impact of the decline in commuter travel has been felt by public transport providers, who have seen a marked and sustained drop in revenue from commuter travel since the pandemic. This shift has also been visible in the office market in UK cities. A recent report by Savills found office construction in Manchester in Q1 2023 was down 29% on the five-year Q1 average.¹⁰ Similarly, construction in London in 2022 fell around 30% below the previous 10-year average.¹¹ A survey conducted by estate agency Knight Frank in 2023 found that '50% of employers with more than 50,000 staff intended to reduce office space, typically by 10% to 20% in the next three years'.¹² However, the same survey also found that smaller multinational firms planned to expand their office presence in the next three years. Participants at our roundtable also pointed to a number of major companies that are currently buying back office space that they sold during the pandemic.

Taken together, these findings point to a high degree of variability in current and future demand for office space based on geography and commercial exigencies. Demand for premium office space in major cities looks set to continue to rise in the near future, particularly among emerging firms and those with multinational workplace policies. As noted in our stakeholder roundtable: "[there is] huge demand for premium office space; location matters massively, especially with regard to inter-regional connections. People want a walk of no more than five minutes from station to office."¹³

Looking further ahead, the strong preference of hybrid workers for a shorter commute may yet further alter the demand and function of office space in the UK. In the US and other large European countries, an increasing number of companies now operate multiple regional or sub-regional offices, whereas before the pandemic operations were centralised in a single city centre office. The advantage of this model (known as 'hub-and-spoke' or the 'anchor' model) is that employees are able to benefit from spending time with colleagues without the burden of commuting into the city centre, or to London from a regional city on a regular basis. This enables employees to find a better balance between home-working and office-working, and also affords greater opportunity for workers to choose where they want to live, whether that choice is at a national level, between regional cities and London, or within cities between the city centre and the suburbs.¹⁴ Given the UK's extremely centralised services-based economy, increased adoption of the hub-and-spoke model at a national level could boost regional productivity, creating new centres for skills and knowledge. Co-working space providers have highlighted increased interest since the pandemic, suggesting they are seeing growing demand from businesses and workers for smaller offices space outside of city centres.¹⁵ This more flexible approach to location, combined with a hub-and-spoke model at the national level spreading work into regional cities, could boost productivity and employment significantly outside of London, and outside of city centres.

The decline of the daily commute has also led workers to re-evaluate where they live in terms of proximity to city centres. Survey analysis conducted by LifeMoves suggests that many workers, despite commuting less frequently, have a strong preference for an even shorter commute than before. Almost half (49%) said that they want to live within 10 miles of their workplace, while almost two thirds (65%) said that access to public transport was important.¹⁶

Given these findings, in the immediate future more flexible and infrequent commuting is projected to reinforce long-standing trends in the residential composition of cities: younger workers will continue to live close to city centres, while workers with families will prioritise suburban areas with direct transport links into the centre. The longer-term outlook is less static. A shift toward the 'hub-and-spoke' office model has the potential to fundamentally alter the residential make-up of cities and the nature of the now-hybrid commute, whether at a city level, reducing demand for intracity travel, or at a national level, increasing demand for inter-city travel as employees gather regularly at the hub.

Finally, changes in the volume and patterns of commuter travel have also impacted the demand and distribution of amenities and weekday leisure in cities. The reduced presence of commuters in city centres has resulted in lower weekday footfall and demand for cafés, on-the-go eateries and post-work amenities such as gyms and hairdressers. The overall impact on city economies is captured in a report by the CEPR, which estimates that '[n]eighbourhoods into which people commute 20% less often experience an average decline in spending of 7%'.¹⁷ Given the rise of hybrid working, people now spend more time working from home, and so demand has shifted away from city centres towards neighbourhood and suburban

economies. In terms of overall impact, a recent report by the University of Sheffield estimates that the 'permanent change in remote working will shift £3 billion in annual retail and hospitality spend out of the largest city centres'.¹⁸ Furthermore, local economies with a higher share of resident commuters stand to benefit the most, with research by the CDRC finding that high streets in commuter towns have 10% fewer vacancies.¹⁹

Recommendation:

While commuter volumes remain lower than pre-pandemic, 49% of people cannot work from home, and most of those who can do not do so exclusively. If more companies do shift further towards a hub-and-spoke model to take account of changing preferences, this only increases the importance of connections between cities and towns, as well as within them. In this context, further investment and service planning for suburban lines and stations may be needed, with knock-on potential benefits for local economies.



The Knowledge City

Three key takeaways for the future:

Improved digital technology and increased familiarity with home working have not driven a permanent move to only working from home.

Dynamic agglomeration benefits persist in cities and have not been fully replicated digitally, something that is unlikely to change in the next few years.

As workplaces allow for ideas to be exchanged within companies, cities will continue to allow for the exchange of ideas between companies and sectors.

As the previous section set out, the coronavirus pandemic significantly disrupted working patterns for people across the UK. While the majority of jobs still needed to be done at a workplace, there was a 28 percentage-point increase in the prevalence of home working, from 3% in 2011 to 31% in 2021. This trend varied between cities, with a more pronounced shift towards home working seen in cities with greater concentrations of office workers: in London, the proportion of residents working from home reached 42% in 2021.²⁰

This shift towards homeworking has since partially reversed, with a majority of workers who were previously working from home adopting a hybrid model. Various stakeholders noted that between two and four days in the office a week is a norm that is now well established. This appears to match workers' preferences, with three-quarters (75%) of those who experienced working from home during the pandemic stating that they wished to work from home "sometimes" or "often" in the future. Only 13% wanted to work from home full-time after the pandemic.²¹

It is worth investigating why improved digital technology, and increased familiarity with home working, has not driven a more permanent move towards working only from home. A significant historic reason why companies locate in cities is because of the benefits that they gain from being close to deep labour markets, large groups of customers and suppliers, and providers of professional services. The greater complexity of cities allows for improved "matching", with companies able to be pickier about the quality of their employees, suppliers, and providers of additional business services; companies are also closer to more potential customers. Some of the benefit of locating in cities has been eroded by the proliferation of digital technologies, with companies now able to hire anyone with an internet connection, speak to suppliers anywhere, and to use professional services from companies that are nowhere near their place of business.

Given the high cost of locating in cities, this would imply that companies should move to fully remote operation. This has not happened. That it has not happened is due to the persistent benefits of working in an office. The most significant of these – and that which will be most important in the future – is the improved learning, teaching, and exchange of ideas that takes place in person. For example, analysis of eye movement during online conferencing suggests that idea generation is harder in these contexts than in person.²² During our roundtable, stakeholders raised the difficulty of maintaining company cultures without staff attending an office regularly.²³ Because firms still have incentives to require that people work from the office at least some of the time, they still need to be located in places that are easily accessible for large groups of workers. In most cities in the UK, this means being located a short walk from a railway hub. Stakeholders have noted that there is huge demand for premium office space, and that location matters significantly.²⁴ For example, in Leeds it has been noted that: "with above average levels of take-up in 2023, demand for best-quality space was strong, accounting for 74 per cent of annual take-up", with a real supply squeeze on Grade A space.²⁵

However, this is not the only benefit of locating in a city. Just as offices allow for ideas to be exchanged between people within companies, cities allow for the exchange of ideas between companies and sectors. People working in cities have access to significant cultural amenities and are in close proximity to businesses in their sector – and indeed in sectors

that are apparently unrelated. This creates significant opportunities for the cross-pollination of ideas through informal conversation and chance meetings. This is especially true when cities have the social and professional networks that create regular opportunities for people working in different companies and sectors to meet and discuss ideas. Physical assets in the public realm, cultural assets, and organisations can all improve this diffusion of ideas.²⁶ Knowledge and skills are also transferred between companies and sectors when workers move between jobs. In cities, greater proximity to – and visibility of – other companies, as well as the aforementioned chance meetings and networking, allows workers more opportunities to move into related positions in other companies or sectors.

The relative erosion of benefits related to “matching” – when set against the continued significance of learning and information exchange both within and between companies – means that cities will increasingly serve sectors that particularly benefit from this sharing. In fact, this could be interpreted as a continuation and acceleration of a long-running trend of cities pivoting towards “interactive” occupations: data shows the share of “interactive” occupations growing faster in cities than in non-urban areas, in a trend beginning as early as the 20th century.²⁷

The acceleration of this trend presents a real opportunity to reshape cities according to their new economic function as places of innovation and information sharing. The benefits from diffusion of skills and knowledge between firms and sectors is external to individual workers or companies, but companies choosing to locate in cities will increasingly be those knowledge-intensive firms that are most incentivised to maximise the dynamic benefits that accrue. An important model for how this might be achieved is that of the “innovation district”. This is where established companies, start-ups and universities cooperate to put in place the institutions and structures that allow for information sharing and the exchange of ideas.²⁸

There are different models of how this could work, playing to the existing strengths of different British cities. The “anchor plus” model – where significant mixed-use development is centred around major anchor institutions, typically universities or other research institutions – may be appropriate for cities with significant research universities and large, attached groups of students and graduates. The strength and reputation of UK universities makes this an attractive option for many British cities. The “urban regeneration” model is where disused or under-utilised urban areas – often historic waterfronts, docklands, or areas of heavy industry – are repurposed. This model is facilitated by historic building stock and easy access to city centres. This model is best exemplified by Boston’s South Boston waterfront development and Seattle’s South Lake Union area. The development of Canary Wharf and Media City Salford are key examples of how this model can succeed in British cities. The third and final model, the “science park” model, is where traditionally low-density areas of innovation are densified through development and addition of transport links. This model may be appropriate for medium-density areas on the peripheries of cities, or between medium-sized and small cities. Stakeholders raised that regional city economies in the UK are not necessarily driven by city centre economies, but areas around the edges of cities and areas in close proximity to cities. This model could therefore suit the UK’s urban geography, which – outside of London and a handful of larger cities – is characterised by clusters of small and medium-sized towns and cities in close proximity to each other.

While the potential to create innovative “knowledge hubs” exists, this shift may present challenges for other residents of cities. For those who do not have advanced qualifications or experience in these high-information sectors, job opportunities in these sectors may be closed off. Meanwhile, influxes of highly-paid workers may further increase cost pressures for existing residents if there is no accompanying investment in transport infrastructure and housing stock. It should be noted that, even in London, those working from home never accounted for a majority of the population during the pandemic. Many workers in cities remain dependent on workplaces that they must attend in person. These workers may continue to find themselves living in cities that are more expensive without commensurate increases in their incomes. On the other hand, clusters of high-value firms present opportunities for companies that sell to employees of those firms – those in retail or hospitality, for example. Revenues from these firms may also finance investments to alleviate pressures on local communities, to provide opportunities to local people, and to improve urban environments – these steps could significantly improve quality of life for all residents, including those not directly employed by knowledge hub companies.

Recommendation:

Despite the shifts in how cities operate that have taken place, a move to a fully remote workplace has not become a central feature. There is significant potential to lean into evolving cities to harness the benefits of dynamic agglomeration and to support increased growth and productivity. The knowledge hub model has significant potential but needs to be supported by investment in transport infrastructure and housing stock to ensure it can drive the widest possible benefits, and not see these limited to only the higher-paid.



The Productive Regional City

Three key takeaways for the future:

Disparities remain not only between regions but between cities, with the benefits of agglomeration accruing more to smaller cities in the south than those in the north due to lesser connectivity.

Investing in the productivity of these cities is likely to remain a priority, as an additional £47 billion per year would be generated for the economy if the eight largest cities outside London met their potential.

Achieving this would require denser cities with further investment in rail infrastructure to increase the agglomeration effects and help attract businesses and workers in knowledge-based, high-productivity sectors.

The UK has highly unequal levels of productivity between regions, with studies finding that the UK is among the most regionally unequal advanced economies.²⁹ In 2021, London had a Gross Valued Added (GVA) per hour worked of £51.08, well above the UK average of £38.33 and 59% higher than the lowest-performing region or country, which was Wales (£32.19).³⁰

The UK's regional disparities in productivity are well-known to policymakers and have seen considerable focus as an economic priority across local and national governments, with cross-party consensus on the need for action to reduce economic disparity between UK cities and regions. Despite seeing the heaviest falls in commuting volumes, London has a strong infrastructure base from which to recover commuting patterns. In contrast, regional cities may struggle more, according to one of our stakeholders: "Re-establishing the commuter city into northern regional cities is more difficult than in London, as a result of poorer transport infrastructure."³¹ With a focus on growth in every corner of the country, the new Labour government will consider the opportunities that devolution, the role of Mayors and improving "left behind" areas in the country represent in achieving productive regional cities.

However, spatial disparities are not solely at a regional level, but also between cities. Theories of agglomeration highlight that larger cities are expected to be more productive as their larger populations facilitate the accumulation of knowledge required by high productivity industrial sectors. However, large cities in Scotland, the North of England and Midlands, such as Birmingham, Glasgow, Leeds, Liverpool and Manchester, are currently underperforming compared to smaller cities in the Greater South East, such as Brighton, Cambridge and Reading (see Table 1).³² This is partly explained by the fact that, although high productivity sectors are found in the larger cities, the share of jobs that are in high productivity sectors is low. Smaller cities in the South tend to have around one third of their jobs in their five most productive sectors compared to only around 10% of jobs in the large cities.³³ Henri Murison from the Northern Powerhouse Partnership also suggested that it was also often due to a restrained travel to work area due to a lack of connectivity – big Northern cities need a significantly wider talent pool to reach the productivity levels expected for their size.³⁴

Investing in the productivity of these underperforming large cities will remain a priority: it is estimated that an additional £47 billion per year would be generated for the national economy if the eight largest cities outside London were to meet their productivity potential.³⁵ The new Government aims to have "growth in every corner of the country, so that every town, village and city has a role to play, and can reap the rewards of a decade of national renewal".³⁶ According to Centre for Cities, in order to reach this objective, large UK cities would need to increase their density and make further investments in local transport infrastructure to increase the agglomeration effects that will help attract businesses and workers in knowledge-based, high-productivity sectors. Other actions identified by the Centre for Cities include:

- Increasing spending in parts of the country that lag behind the current national average;
- End austerity for local government;

- Reform local government and devolve powers over services and spending;
- Facilitating bus franchising to improve services;
- Investing in struggling city centres through City Centre Productivity Funds;
- Targeting R&D spending in places that currently underperform but have enough activity to suggest the increased spending will have an outsized impact.³⁷

As one of our stakeholders said at the roundtable: “[It is] also important to remember that not all jobs are conducive to hybrid working, especially in less office-based economies outside of London. Many don’t have the option, and so will continue to rely on public transport for their commute.”³⁸

Table 1: Comparison of productivity between large cities in the North of England, Midlands and Scotland and small cities in the Greater South East³⁹

Large cities in the North, Midlands and Scotland		Small cities in the Greater South East	
City	GVA per hour worked	City	GVA per hour worked
Manchester	£36.70	Slough	£63.99
Leeds	£34.50	Milton Keynes	£45.87
Glasgow	£34.79	Reading	£43.69
Liverpool	£33.37	Cambridge	£40.74
Birmingham	£32.77	Brighton and Hove	£39.04

In the UK’s biggest cities outside of London, just 40% of people are able to reach their city centre by public transport in less than 30 minutes, which lags behind the 67% who are able to do so in similar-sized European cities.⁴⁰ However, stakeholders argued that investment based solely on journey time savings is insufficient and that a broader city-region approach is needed, focusing on increasing the effective travel to work area for the entire region, boosting the labour pool and seeking to attract the type of higher paying jobs that drive productivity in southern cities. There have been proposals for improvements to rail infrastructure across the North and Midlands that take a regional approach. While some schemes such as the TransPennine Route Upgrade are underway, stakeholders are concerned that considerably more is needed.⁴¹

Stakeholders debated whether our current approach to agglomeration takes sufficiently into account the benefits of investing in city regions, as opposed to individual cities. The previous approach of “levelling up” focuses on giving cities in the UK the tools to “be like London” according to Henri Murison from the Northern Powerhouse Partnership, with little consideration for how different cities across the country face unique challenges and may not benefit from applying the London model to all.⁴² This was illustrated with the example of Manchester – even with right investment in place, it was argued that the city’s travel to work area is currently too small to support a London model of productivity. However, if transport networks could be leveraged to create a Northern City Region similar to the Netherlands’ Randstad region, the labour and skills supply would be more than sufficient to meet the lofty goals for the city.

Although some stakeholders have called for the inclusion of Birmingham in any Northern rail infrastructure upgrades, there is currently a focus on improving East-West links across the North – with a route connecting Liverpool, Manchester and Leeds at its core.⁴³ This would allow a wider area and larger population to access city centres and urban environments that are often home to high-productivity sector knowledge hubs.⁴⁴

The recent National Infrastructure Commission Infrastructure Progress Review 2024 identifies areas with poor connectivity across the Northern Powerhouse region that remain to be addressed by infrastructure investment policy. This includes lines connecting Birmingham to Manchester, Liverpool and the North West, and connecting Birmingham to Yorkshire via the East Midlands. It particularly emphasises the importance of long-term strategy and foresight to allow local authorities and regional governments to lay the groundwork for the right investment to take place. Taken together, the population

of the three largest built-up areas outside of London (Greater Manchester, the West Midlands and West Yorkshire) have a population of over 7 million.⁴⁵ The Review recognises the enormous potential for improved productivity held within these cities, and what a significant effect it would have on national productivity and growth, and in reducing regional disparities. Rail could underpin this opportunity, enabling trips both from the hinterlands into city centres and long-distance connections between cities, unlocking the productivity benefits of better-connected leisure and employment, as well as improving access to goods and services across the region.⁴⁶

Randstad case study:

The Randstad region in the Netherlands is home to almost half the country's population spread between Amsterdam, Rotterdam, the Hague and Utrecht in a broad and rich urban region. With almost 8.4 million people and deeply intertwined city economies, excellent transport links have allowed the region to become one single economic area, stronger than the sum of its parts. This means economies of scale in terms of the labour market, inputs and outputs, and all the other benefits of agglomeration that we have described. These benefits drive outperformance in the Randstad as compared to the Netherlands' national averages, with 5.3% higher GVA per worker in 2013.⁴⁷



Agglomeration benefits accrued in particular to workers in high-skilled and highly-paid service jobs, for whom the Randstad functions effectively as a single city – a model that could support and leverage the UK's existing specialisation in services.⁴⁸ Given this advantage in services, the Randstad region hosts the third largest number of multinationals in Europe, after only London and Paris, contributing over \$700m to the regional economy.⁴⁹ The success of the Randstad is often attributed to bringing together "the strengths of the existing transportation networks of Rotterdam (such as its metro system) and The Hague (the tram service)", while providing sufficient connectivity within the whole area to create an expanded, highly educated and highly connected labour force, and therefore an attractive location for private sector investment, particularly from services sector multinationals.⁵⁰ Back in Britain, investing new (and existing) policies such as the TransPennine Route Upgrade, the Northern Powerhouse and the Midlands Hub to expand connectivity between and within these urban regions and their hinterlands is essential to capturing the benefits of agglomeration for Northern cities.

Recommendation:

Boosting the productivity and potential of cities in the North of England must remain at the heart of a future plan for growth. Enhanced transport connections and greater city density are key to achieving the agglomeration benefits currently enjoyed by smaller cities in the south of the country. Enhanced enhanced inter-city regional transport links has the potential to support a wider Northern City Region and should be part of future discussions on the best way to boost growth.

The supporting themes

The Sustainable City

According to a 2022 report by the Environmental Audit Committee, '[t]he UK built environment is responsible for approximately 25% of total UK greenhouse gas emissions'.⁵¹ Given that the bulk of property and infrastructure development is concentrated in cities, it follows that cities will have to undergo a dramatic and rapid transformation for the UK to meet its net-zero target by 2050.

One important aspect of this is the conservation and expansion of open green space such as parks and path networks, which contribute to urban cooling and reduce exposure to polluted air.⁵² Private developers and public urban planners today recognise the importance of green space in cities, and so almost all new major city developments of the last decade have provided new green space in the form of parks, roof gardens or canopied outdoor areas. The most innovative and environmentally-friendly examples provide new green space that is connected to existing green space, creating green networks that extend beyond the immediate development area, and so benefiting more people through the greening of the wider urban environment.

The role of adaptation in the process of urban greening also touches on the wider importance of repurposing existing land and developments, and therefore moving away from the process of demolition and reconstruction. Although the previous Conservative governments were explicit in a commitment to retrofitting and repurposing, the contemporary rate of demolitions in UK cities saw very little change in the last decade.⁵³ In 2023 the City of London Corporation became the first planning authority to 'issue planning guidance in which developers will be expected to carry out a detailed review of the carbon impact of development options before submitting an application'.⁵⁴ Other planning authorities are expected to follow this example, which should quite rapidly lead to a substantial reduction in the volume of demolitions in British cities. This could align with the current Labour Government's efforts to reform the planning system to build more housing. It is important to recognise that despite push-back from some sections of the construction industry, this shift would not necessarily entail a reduction in overall construction volume. Instead, construction would focus more on repurposing existing sites, reducing the carbon footprint of the industry while still providing the opportunity to deliver new green developments.



Advancements in technology and AI will also play an important role in the development of sustainable cities. For example, the rollout of electric vehicles and driverless cars across cities has the potential to radically reduce carbon emissions. Although it is generally accepted that mass adoption of electric vehicles will not happen by 2030 (even if prices continue to fall), increasingly onerous regulation of non-electric vehicles is expected to at least accelerate the transition. This is especially true in cities, with London's Ultra Low Emissions Zone (ULEZ) already imposing a higher charge on high emission vehicles. In the long term, road transport is expected to undergo an even greater transformation, with mass rollout of driverless cars. Nevertheless, the timeline for mass adoption remains unclear, given price constraints and concerns around the regulation and taxation. This underlines the importance of green public transport capacity.

In the near term, the model of integrated transport systems is receiving increasing attention across the world as a means of incentivising modal shift towards public transport. In Finland, Helsinki's 'Mobility as a Service' model has integrated multiple different public transport systems within a single digital platform, simplifying and opening up access to public transport across the city and thereby encouraging a shift away from car usage.⁵⁵ Evaluation studies of the Helsinki system, as well as a similar model introduced in Lisbon, have observed less road congestion and an increase in the volume and equitable usage of public transport services.⁵⁶ Universal basic mobility approaches are already being trialled in some international locations, for example in south Los Angeles where residents are given \$150 a month to spend on a menu of transport options to encourage a move away from cars towards public transport.⁵⁷

The Leisure City

Before the pandemic, leisure economies in cities across Britain were undergoing an important but gradual transformation. While city centre tourism and weekday commuter consumption were at an all-time high, government investment in local regeneration projects was beginning to transform ailing high streets into multi-purpose communal areas focused on leisure activity rather than traditional bricks-and-mortar retail. At the same time, the leisure industry was adapting to changes in consumer preferences and the oversaturation of the casual dining sector, with an increasing number of businesses pivoting towards a more social and experiential form of leisure and hospitality driven by technological innovation and demand for unique 'Instagram-ready' experiences.

The initial impact of the pandemic was an effective stop to tourism. This, alongside reduced commuter footfall, was particularly damaging for the leisure industry, with out-of-home leisure spending falling by an estimated 37% in the first year of the pandemic alone. The local entertainment leisure sector – encompassing pubs, restaurants, music venues – was one of the worst hit, with an estimated reduction in spending of 41%. Figures from the AxiPartners CGA Hospitality Market Monitor in 2023 showed that 13,000 hospitality businesses had permanently closed, representing around 10% of the overall total.⁵⁸ Other forms of leisure such as theatres and arts centres also experienced a similarly dramatic drop in revenue. Many businesses had to close, and those that remained operational took a significant hit to their reserves, resulting in ongoing financial uncertainty at a time of rapidly rising costs.

The reopening of the economy led to a resurgence in leisure spending. Within city centres, weekend leisure and the nighttime economy has recovered in many areas to pre-pandemic levels. In some cities that are less dependent on international tourism, spending has now risen above the pre-pandemic baseline. Many leisure businesses located outside of city centres have bounced back strongly, in large part due to increased footfall from hybrid workers. However, there is also an ongoing impact from the cost-of-living crisis, as people continue to be selective about the money they spend and prioritise those that deliver the highest-impact experiences. As one of our interviewees said, over time: "[Physical] retail will be more centred on showrooms, pop-ups, and services."

Current data suggests that city centres will continue to drive the leisure economy in the short- to mid-term through a combination of flagship attractions, innovative social and technological experiences and the nighttime economy.

The projected recovery of international tourism to pre-pandemic levels will further boost the strength of both weekend and nighttime leisure in city centres, while better transport connectivity at night would further strengthen the nighttime economy. Michael Kill at the Night Time Industries Association told us: "Ultimately people see activity-led leisure - in the eyes of the consumer - as more bang for buck, [but this is] potentially not a silver bullet that all businesses need to follow."⁵⁹ This touches again on the interplay of what people are choosing to spend on now while cost of living pressures remain front of mind, versus what they might choose to do if they had greater disposable income.

Given the recovery and projected future growth of the leisure economy in city centres, existing inter-city rail infrastructure will continue to play an important role in transporting people between and into cities, even while commuter travel remains below pre-pandemic levels. With the future growth of distinct localised leisure economies, rail could also continue to facilitate intra-city travel alongside other forms of transport, opening up access to cities' changing variety of leisure experiences. However, as stakeholders noted in the roundtable, this could mean a shift for how the rail system is operated depending on the choices made on which customers to prioritise. Michael Kill mentioned that there is a "strong sense that despite government and companies saying that transport infrastructure is now focused on leisure, the reality is the infrastructure does not yet exist to adequately serve a 24-hour leisure economy."⁶⁰



Future gazing – what stakeholders think about the future of cities

Our stakeholder engagement not only deepened our understanding and assessment of the key themes we had already identified, but it also provided insights into the breadth of opinion when it comes to the future of cities across a range of key topics and trends. Whilst there was general agreement about the direction of travel for cities, there was healthy debate on the best ways to get there, and the roles our themes would have on influencing that path.

Key insights that came up across the course of our discussions on the central themes were that:

- **Commuter City:** Hybrid working is here to stay – online working alone does not provide all the interactions employees and businesses need.
- **Knowledge City:** Cities benefit from the continued dynamic aspects of agglomeration – these have not been fully replicated digitally, something that is unlikely to change soon.
- **Productive Regional City:** However, there are significant disparities across Britain, with larger cities in the north struggling to realise full agglomeration benefits, demanding a renewed focus.

And on the support themes, stakeholders were clear that:

- **Sustainability:** Climate change is already driving shifts in how people travel, how buildings are constructed and how green space is harnessed – over time, these shifts will dramatically change the way cities look and how we experience them.
- **Leisure City:** The experience of cities is increasingly front of mind, with more transactional leisure online or locally and more engaged, experiential activities being sought out in cities.

Our discussions also highlighted a range of topics that fell outside of our core themes but which were still important insights, including the future of cities in light of ageing demographics, the potential value of investing into city regions for the UK economy, and the impact rapidly changing technologies may have on cities and city life.

Ageing city: European countries in general are facing a demographic crisis, with not enough workers entering the workforce to replace those leaving and soon, it is expected, not enough workers paying into pensions to support those receiving pensions. Ageing cities would have significant consequences for real estate, with very different residential requirements. They would vastly change the type and time of travel demanded and the shape and type of leisure and retail available. Moreover, the type of jobs on offer within cities would begin to shift to accommodate a different demand profile for services, particularly for care. With existing skills shortages already impacting cities, stakeholders felt it important to underline the challenges this demographic transition will bring and the potential lack of able workers it could result in if the immigration system cannot respond dynamically.

Tech city: AI was expected by our stakeholders to have a significant impact on the future of work, potentially even reducing the number of people that actually need to work in any given economy. The changes advanced technologies may demand of our cities as they are implemented are hard to define in advance, in part because we do not yet know what those future technologies will be. From a wider societal perspective, the disruption from AI could be so significant as to change our economic model, with some seeing the introduction of a Universal Basic Income-type approach as inevitable should AI cause such a significant shift in employment. All sectors will be seeking to find a way to balance the new opportunities and demands of AI with the needs of their workforce and their customers, so our stakeholders expect to see significant shifts in this arena in the coming years.

Conclusion

Exploration of our five themes has enabled us to both interrogate what the data is saying about the future of cities and identify where this aligns – and where it does not – with the experience of the stakeholders we interviewed. The key takeaways from each of the central themes are summarised as:

Commuter City:

- The commuter city persists, but people come in less frequently and want better experiences at work when they do.
- There remains a high degree of variability in current and future demand for office space, with a continued 'flight to quality'.
- The change in commuter patterns also changes the services on offer, which has knock-on effects for the shape of the leisure city.

Knowledge City:

- Improved digital technology and increased familiarity with home working has not driven a permanent move to only working from home.
- Dynamic agglomeration benefits persist in cities and have not been fully replicated digitally, something that is unlikely to change in the next few years.
- As workplaces allow for ideas to be exchanged within companies, cities will continue to allow for the exchange of ideas between companies and sectors.

Productive Regional City:

- These benefits of agglomeration continue to be felt less in larger cities in the north than in smaller cities in the south.
- Investing in productivity in these cities will remain a priority under Labour's growth plans: an additional £47 billion per year would be generated for the economy if the eight largest cities outside London met their productivity potential.
- Achieving this will require denser cities with further investment in rail infrastructure to increase the agglomeration effects that attract businesses and workers in knowledge-based, high-productivity sectors.

These are also shaped by the future of the Sustainable City and the Leisure City:

Sustainable City:

- Future construction will need to focus more on repurposing existing sites, reducing the carbon footprint of the industry while still providing the opportunity to deliver new green developments.
- The model of integrated transport systems is receiving increasing attention across the world as a means of incentivising modal shift towards public transport.

Leisure City:

- City centres will continue to drive the leisure economy in the short- to mid-term through a combination of flagship attractions, innovative social and technological experiences and the nighttime economy.
- The resurgence of the local high street has been accelerated by increased footfall from hybrid workers, which in turn should accelerate the transformation of the high street into local hubs of leisure activity.

Overall, this paints a picture of cities that are different but no less important than they have been in the past. It also displays the interconnectivity of the commuter and leisure offer a city develops in the years ahead: commuters are a convertible opportunity for enhanced leisure spend and leisure travellers are likely to drive forward enhanced experiential amenities that will attract commuters. This means that, rather than thinking about fewer people coming in and out of cities over time, we need to have a more nuanced conversation about the connectivity they will expect, the need to make this more sustainable, how this can join up the UK's cities and the benefits to the economy of a wider set of thriving city locations.

Recommendations:

Each of our core themes highlighted a number of opportunities to shape the way cities evolve in the UK into the future. With enhanced productivity in mind, we drew out a recommendation from each, which could help cities and the economy to thrive into the future.

Recommendation one – supporting the Commuter City: While commuter volumes remain lower than pre-pandemic, 49% of people cannot work from home and most who can do not do so exclusively. If more companies do shift further towards a hub-and-spoke model to take account of changing preferences, this only increases the importance of connections between cities and towns, as well as within them. In this context, further investment and service planning for suburban lines and stations may be needed, with knock-on potential benefits for local economies.

Recommendation two – supporting the Knowledge City: Despite the shifts in how cities operate that have taken place, a move to a fully remote workplace has not become a central feature. There is significant potential to lean into evolving cities to harness the benefits of dynamic agglomeration and to support increased growth and productivity. The “knowledge hub” model has significant potential but needs to be supported by investment in transport infrastructure and housing stock to ensure it can drive the widest possible benefits, and not see these limited to only the higher-paid.

Recommendation three – supporting the Productive Regional City: Boosting the productivity and potential of our northern cities must remain at the heart of a future plan for growth. Enhanced transport connections and greater city density are key to achieving the agglomeration benefits currently enjoyed by smaller cities in the south of the country. Creating enhanced inter-city regional transport links has the potential to support a wider Northern City Region and should be part of future discussions on the best way to boost growth.

Endnotes

- 1 Financial Times, April 2024, Why we can't stop staring at our faces. See: <https://www.ft.com/content/12b97960-4bbd-4eaf-860b-eb001e911e96> Accessed 10/06/24
- 2 ING Logistics & Automotive, July 2022, European public transport recovers but commuting has changed. See: <https://think.ing.com/articles/european-public-transport-recovers-but-commuting-has-changed>. Accessed 10/06/24
- 3 Office of Rail and Road, December 2024, Passenger rail usage July to September 2024. See: <https://dataportal.orr.gov.uk/media/s5bpixik/passenger-rail-usage-jul-sep-2024.pdf> Accessed: 07/01/25
- 4 National Library of Medicine, March 2023, Survey evidence on Covid-19 and its impact on rail commuting patterns in Great Britain. See: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9886569>. Accessed: 10/06/24
- 5 Transport for London, December 2023, Travel in London 2023 Consolidated estimates of total travel and mode shares. See: <https://content.tfl.gov.uk/travel-in-london-2023-consolidated-estimates-of-total-travel-and-mode-shares-acc.pdf>. Accessed 10/06/24
- 6 ONS, February 2023, Characteristics of homeworkers, Great Britain: September 2022 to January 2023. See: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/characteristicsofhomeworkersgreatbritain/september2022tojanuary2023>. Accessed 10/06/24
- 7 NEBR working paper series (no. 30446), Working from home around the world, September 2022. See: https://www.nber.org/system/files/working_papers/w30446/w30446.pdf Accessed: 07/01/25
- 8 WPI structured interview with Ian Wright, Head of Innovation and Partnerships at Transport Focus, interviewed by WPI Economics April 2024
- 9 Ipsos, June 2021, What the Future: Commuting. See: <https://www.ipsos.com/sites/default/files/What-The-Future-Commuting.pdf>. Accessed 20/06/24
- 10 Savills, May 2023, Manchester Office Spotlight – Spring 2023. See: https://www.savills.co.uk/research_articles/229130/347513-0. Accessed 10/06/24
- 11 Deloitte, May 2022, London Office Crane Survey – Summer 2022
- 12 Reuters, June 2023, Big global employers plan modest cuts to office space: Knight Frank.. See: <https://www.reuters.com/markets/big-global-employers-plan-modest-cuts-office-space-knight-frank-2023-06-06>. Accessed 10/06/24
- 13 Stakeholder Roundtable chaired by WPI Economics, April 2024
- 14 Forbes, August 2022, Hub and Spoke – The Emerging Work Model, available here accessed at 10/06/24 and Instant Rethinking Workspace, March 2021, The Rise of Suburbia: Can a hub and spoke model really work?, <https://www.forbes.com/consent/ketch/?toURL=https://www.forbes.com/councils/forbesbusinesscouncil/2022/08/16/hub-and-spoke-the-emerging-work-model/> accessed at 10/06/24
- 15 Guardian, 2 October 2023, Half of UK firms open offices outside city centres, study claims, by Mark Sweney. See: <https://www.theguardian.com/business/2023/oct/02/half-of-uk-firms-open-offices-outside-city-centres-study-claims>. Accessed: 23/09/24
- 16 LifeMoves, Can we expect a commuter reboot? See: https://2391de4ba78ae59a71f3-fe3f5161196526a8a7b5af-72d4961ee5.ssl.cf3.rackcdn.com/8516/1893/9781/MC015-RE-CB-0221-LifeMoves_commuter_reboot.pdf. Accessed: 10/06/24
- 17 CEPR, November 2022, Remote working and the new geography of local service spending. See: <https://cepr.org/voxeu/columns/remote-working-and-new-geography-local-service-spending>. Accessed: 10/06/24

- 18 University of Sheffield Department of Economics, How does remote working affect our local economies. See: <https://www.sheffield.ac.uk/economics/research/impact-and-knowledge-exchange/how-does-remote-working-affect-our-local-economies>. Accessed: 10/06/24
- 19 Consumer Data Research Centre, Post-Covid Resilience of Commuter Towns. See: <https://data.cdrc.ac.uk/stories/post-covid-resilience-commuter-towns>. Accessed: 10/06/24
- 20 Centre for Cities (2023). Office politics: London and the rise of home working. See: <https://www.centreforcities.org/reader/office-politics/the-impact-of-covid-19-on-agglomeration/>. Accessed 24/04/2024.
- 21 Felstead, A and Reuschke, D (2020) 'Homeworking in the UK: before and during the 2020 lockdown', WISERD Report, Cardiff: Wales Institute of Social and Economic Research. See: <https://wiserd.ac.uk/publications/homeworking-ukand-during-2020-lockdown>. Accessed 24/04/2024.
- 22 Brucks M and Levav J (2022), Virtual communication curbs creative idea generation, *Nature*, 605(7908), 108-112; Posner M (2011), *Cognitive Neuroscience of Attention*, Guilford Press; Rowe G, Hirsh J and Anderson A (2007), Positive affect increases the breadth of attentional selection, *Proceedings of the National Academy of Sciences, USA* 104, 383-388; Mednick S (1962), The associative basis of the creative process, *Psychol. Rev.* 69, 220-232; Jung R, Mead B, Carrasco J and Flores R (2013), The structure of creative cognition in the human brain, *Frontiers in Human Neuroscience*, 7, 1-13
- 23 Stakeholder roundtable chaired by WPI Economics, April 2024
- 24 Ibid
- 25 Yorkshire Times, February 2024, Leeds Office Rents Now Breaking All Records. See: <https://www.yorkshiretimes.co.uk/article/Leeds-Office-Rents-Now-Breaking-All-Records>. Accessed: 10/06/24
- 26 Brookings (2014). The Rise of Innovation Districts. See: <https://www.brookings.edu/articles/rise-of-innovation-districts/>. Accessed 30/04/2024.
- 27 "Interactive" occupations are those related to thought, communication and inter-social activity. Michaels et al (2018). Task specialisation in US Cities from 1880 to 2000. See: <https://www.princeton.edu/~reddings/pubpapers/JEEA-div-labor-2019.pdf>. Accessed 24/04/2024.
- 28 WPI Economics and Imperial College London (2020). White City and Imperial College London: a vision for growth, innovation and community. See: <https://www.imperial.ac.uk/media/imperial-college/about/leadership-and-strategy/white-city/public/A-Vision-for-Growth-20200707-Web.pdf>. Accessed 30/04/2024.
- 29 UK 2070 Commission (2019). Perceptions of Regional Inequality and the Geography of Discontent: Insights from the UK. <https://uk2070.org.uk/wp-content/uploads/2019/01/01-McCann-UK-Regional-Inequality-Debates.pdf> accessed at 10/06/24
- 30 Office for National Statistics (2023). Subregional productivity: labour productivity indices by UK ITL2 and ITL3 subregions. <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/datasets/subregionalproductivitylabourproductivitygvaperhourworkedandgvaperfilledjobindicesbyuknuts2andnuts3subregions> accessed at 10/06/24
- 31 Stakeholder Roundtable chaired by WPI Economics, April 2024
- 32 Centre for Cities (2021). What levelling up really means: Changing the geography of knowledge in Britain. <https://www.centreforcities.org/wp-content/uploads/2021/09/What-Levelling-Up-Really-Means.pdf> accessed at 10/06/24
- 33 Ibid
- 34 WPI Structured Interview with Henri Murison, Chief Executive of the Northern Powerhouse Partnership, interviewed by WPI Economics April 2024

- 35 Centre for Cities (2021). So you want to level up? <https://www.centreforcities.org/wp-content/uploads/2021/06/So-you-want-to-level-up-Centre-for-Cities.pdf> accessed at 10/06/24
- 36 Labour Party (March 2024), Labour's plan to power up Britain. See: <https://labour.org.uk/updates/stories/labours-plan-to-power-up-britain>. Accessed 19/07/24
- 37 Centre for Cities (2021). So you want to level up? <https://www.centreforcities.org/wp-content/uploads/2021/06/So-you-want-to-level-up-Centre-for-Cities.pdf> accessed at 10/06/24
- 38 Stakeholder roundtable chaired by WPI Economics, April 2024
- 39 Office for National Statistics (2023). Subregional productivity: labour productivity indices by local authority district. <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/datasets/subregionalproductivitylabourproductivityindicesbylocalauthoritydistrict> accessed at 10/06/24
- 40 Centre for Cities (2021). Measuring up: Comparing public transport in the UK and Europe's biggest cities. <https://www.centreforcities.org/wp-content/uploads/2023/11/measuring-up.pdf> accessed at 10/06/24
- 41 Transport for the North (2024). Strategic transport plan: Transforming the North. <https://transportforthenorth.com/press-release/integrated-rail-plan-branded-woefully-inadequate/> accessed at 10/06/24
- 42 WPI structured interview with Henri Murison, Chief Executive of the Northern Powerhouse Partnership, interviewed by WPI Economics April 2024
- 43 Transport for the North, Strategic Transport Plan Transforming the North. See: <https://www.alixpartners.com/insights/hospitality-market-monitor>. Accessed: 10/06/24
- 44 HM Treasury and Department for Levelling Up, Housing and Communities (2023). Investment Zones Policy Offer. <https://www.gov.uk/government/publications/investment-zones> accessed at 10/06/24
- 45 National Infrastructure Commission, Infrastructure Progress Review 2024, May 2024. See: <https://nic.org.uk/studies-reports/infrastructure-progress-review-2024/#tab-rail>. Accessed: 30/05/24
- 46 Ibid
- 47 Centre for Cities, June 2016, Building the Northern Powerhouse, Paul Swinney. See: <https://www.centreforcities.org/wp-content/uploads/2016/06/16-05-31-Building-the-Northern-Powerhouse-Lessons-from-the-Rhine-Ruhr-and-Randstad.pdf> Accessed: 05/06/24
- 48 Centre for Cities blog post, Dec 2014, Lessons from the Netherlands on creating a Northern Powerhouse, Louise McGough. See: <https://www.centreforcities.org/blog/lessons-from-the-randstad-on-creating-a-northern-powerhouse> Accessed: 05/06/24
- 49 Cushman & Wakefield, June 2019, Sweet Spot Randstad, Jos Hesselink. See: <https://www.cushmanwakefield.com/en/netherlands/insights/sweet-spot-randstad> Accessed: 05/06/24
- 50 The RandstadRail project: a case study in decision-making strategies under uncertainty, Mendel Giezena, Luca Bertolinib and Willem Saletb, Planning Theory & Practice, 2014 Vol. 15, № 3, 389–430, <http://dx.doi.org/10.1080/14649357.2014.935084>
- 51 Parliament. House of Commons Environmental Audit Committee. Building to net zero: Costing carbon in construction: Government response to the Committee's first report. September 2022. See: <https://committees.parliament.uk/publications/30124/documents/174271/default/>. Accessed 30/04/24.
- 52 University of Leeds, A Brief Guide to the Benefits of Urban Green Spaces, 2015. See: https://leaf.leeds.ac.uk/wp-content/uploads/sites/86/2015/10/LEAF_benefits_of_urban_green_space_2015_upd.pdf. Accessed 30/04/24.

- 53 Parliament. House of Commons Environmental Audit Committee. Building to net zero: Costing carbon in construction: Government response to the Committee's first report. September 2022. See: <https://committees.parliament.uk/publications/30124/documents/174271/default/>. Accessed 30/04/24.
- 54 City of London (2023). Consider green alternatives to demolition, city developers urged. See: <https://news.cityoflondon.gov.uk/consider-green-alternatives-to-demolition-city-developers-urged/>. Accessed 30/04/24.
- 55 OECD (2023). Innovative mobility services in Finland. See: <https://news.cityoflondon.gov.uk/consider-green-alternatives-to-demolition-city-developers-urged/>. Accessed 30/04/24.
- 56 OECD, Transition to Shared Mobility, 2017. See: <https://www.itf-oecd.org/sites/default/files/docs/transition-shared-mobility.pdf>. Accessed 30/04/24
- 57 NextCity, "America's Biggest Universal Basic Mobility Experiment is Taking Place in LA", Jan 2024, available here <https://nextcity.org/urbanist-news/big-universal-basic-mobility-experiment-los-angeles-mobility-wallet> Accessed 10/06/24
- 58 AlixPartners, CGA Hospitality Market Monitor, Q1 2024, available here accessed at 10/06/24
- 59 WPI structured interview with Mike Kill, CEO Night Time Industries Association, interviewed by WPI Economics April 2024
- 60 WPI structured interview with Mike Kill, CEO Night Time Industries Association, interviewed by WPI Economics April 2024



WPI Economics Limited

5-6 St Matthew Street
London
SW1P 2JT

@WPI_Economics

wpieconomics.com

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January 2025