Investment in Places series

Framing a place-based investment strategy for the Upper Lee Valley

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Abstract

In this report, we present our results from the Investment in Productive Places study for the London boroughs of Haringey, Enfield and Waltham Forest, which are part of the Upper Lee Valley and are currently working collaboratively in a Tri-Borough Partnership (TBP). We assess the community capitals framework (with seven capitals including: physical, human, intangible, financial, social, institutional and natural). We analyse variables for each of the capitals in these London boroughs and compare them to a selection of other London boroughs in an experimental data tool for physical, human, financial, social, intangible and natural capital. We find that the boroughs have high ranking financial and physical capital, with Enfield having higher social capital and Waltham Forest and Haringey having higher human capital. The largest challenge for all boroughs is reducing emissions as they are in the bottom 20% for natural capital when comparing sector emissions across the country. Combining the six capitals in our data tool we find all three boroughs to be in the middle range of rankings. A colour coded capitals figure can be found in the executive summary.

Compared to the other TBP boroughs, Enfield has the largest population and job density along with the highest productivity (Gross Value Added/ hour, though all boroughs are below the London average). Haringey has the highest gross weekly pay for residents, Gross Disposable Household Income per head and the highest employment rate for 16-64 year olds, but the lowest productivity. Waltham Forest has the lowest job density and a productivity level below the UK level. Enfield's productivity growth is losing ground as it has increased compared to the UK since 2008 but has declined since 2017. Haringey and Waltham Forest have had declining productivity growth caused by subdued output growth and greater increases in hours worked. Historical investment levels have been declining in Haringey and Waltham Forest with some increases for Enfield in the medium and long term.

We assess specialisation in eight priority sectors from the UK Government's Modern Industrial Strategy 2035. All boroughs have companies that have some specialism in the creative industries. Haringey has notable employment growth in sectors like apparel manufacturing and entertainment. Enfield demonstrates strengths in apparel manufacturing, sewerage, and beverage production, with significant employment growth in construction and warehousing. Waltham Forest stands out in security services and computer repair.

We present a mixed methods approach with data presented and qualitative analysis of how key stakeholders in the Upper Lee Valley are thinking about the capital's investment strategies, including a base-line survey, stakeholder workshop and semi-structured interviews. Whilst the research highlights the boroughs' comprehensive approach to driving investment, fostering inclusive growth, and addressing productivity challenges through strategic partnerships, data-driven decision-making, and adaptable governance structures, it would also seem pertinent that efforts continue to be made to support jobs and training opportunities for residents with a broad range of training needs, including those at the lower levels who may need additional support to access training and the labour market.

Contents

1. Introduction

In this report, we present findings from the Investment in Productive Places project in the Upper Lee Valley, focusing on the London boroughs of Haringey, Enfield, and Waltham Forest[1], which are currently working collaboratively in a Tri-Borough Partnership (TBP). We explore how a joined-up strategy for investment can help productivity to grow in places with potential for improvement.

Our analysis and recommendations are based on the community capitals framework that identifies and measures key assets within the local economy. This approach is highly adaptable to different policy, urban, industrial, and geographical contexts and provides a structured way to assess the drivers of productivity. The framework considers seven forms of capital—human, financial, social, physical, intangible, institutional and natural capital. The aim of this approach is to highlight areas for improvement and better contextualise the key challenges and opportunities for productivity and policy enhancements within a place.

Our Methodology

To deepen our understanding of how some of the most abstract and difficult to quantify elements of the capital's framework are being thought about in practice, we use a mixed methods approach presenting data and qualitative analysis. In addition to gaining insights into how the capitals are understood across a range of stakeholders, we are also interested in the interdependencies across the capitals.

What does productivity for place mean?

Productivity is a positive notion which allows societies, people and firms to "do things better" by creating proportionally more value relative to the amount of resources being used. This is associated with technological change and innovation, requiring joined up value creating activities. It includes investment in places, people, digital capabilities and organisational knowledge. As a result of productivity growth, places become more prosperous, and people will become better off in terms of living standards and general well-being. Labour productivity is the output that each worker produces per hour, and places that are able to raise their worker productivity are observed to have proportionally higher standards of living and wellbeing. However, productivity is also a result of how well organised a place is, and so productivity promotion requires a solid understanding of how the assets interact to create productivity.[2]

Outline of this Report

This report is structured as follows. In section two we discuss the national and local policy context for the London boroughs and present their economic strategy and investments. In section three we compare their economic performance, drivers of productivity and discuss

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[1] The Productivity Institute started working with the London Borough Councils of Haringey, Enfield and Waltham Forest in November 2023. To read more about the Investment in Productive Places project see: https://www.productivity.ac.uk/regions-nations/investment-in-places/.

[2] For a blueprint on boosting UK's productivity see the Productivity Agenda, Coyle, et al (2023) and TPI (2024).

industrial diversity of the three boroughs highlighting the strength of the boroughs in The Government's Industrial Strategy eight priority sectors. Section four sets out the investment opportunities and challenges through an analysis of the capital assets in the council areas and presents findings from our experimental data tool. The fifth section sets out the qualitative methods and analysis. The final section discusses recommendations for a broad-based investment strategy to lead to improvements for the Upper Lee Valley's productivity.

2. The Policy Context

The UK remains one of the most inter-regionally unequal countries in the industrialised world, with significant disparities in productivity, income, and opportunities across places, McCann (2020). Addressing these inequalities is critical not only for improving quality of life and well-being but also for driving sustainable economic growth and resilience. While the UK has global strengths in innovation and high-value sectors, these benefits are concentrated in specific areas, leaving many regions behind.

Current policy efforts focus on enabling inclusive growth and reducing spatial disparities through locally driven strategies. National priorities include fostering investment in infrastructure, skills, and innovation, while empowering local authorities to develop tailored local growth plans that reflect their unique economic and social contexts. These plans emphasise collaboration between public, private, and civic actors to unlock opportunities for productivity improvements and long-term prosperity.

This report adopts a community capitals framework to assess the drivers of productivity and investment opportunities in the Upper Lee Valley. The framework considers seven forms of capital—physical, human, intangible, financial, social, institutional, and natural—providing a holistic view of the assets that underpin economic performance and resilience. By examining these capitals, we aim to identify areas for improvement and inform strategies that support inclusive, sustainable growth across the three boroughs. The seven capitals are:

- Physical capital – infrastructure, machines and housing.
- Human capital – the skills, health and experience of the workforce.
- Intangible capital – innovation, ideas and patents.
- Financial capital – resources supporting the financing of companies.
- Social capital – the strength of communities, relationships and trust.
- Institutional capital – local leadership, capacity and capability.
- Natural capital - environmental conservation, access to green space and policies that contribute to net-zero targets by reducing CO_2 emissions.

The community capitals framework has also been applied in US regional development studies. Emery and Flora (2006) note that a community could become stronger by strategically increasing its capacity within each capital. As the flow of assets are interconnected investing in one capital can trigger positive outcomes across the other capitals. A study by Losada-Rojas et al, (2024) analyses the community capitals at the US county level for the Great Lakes Region. They find that to build community resilience there was a need to increase active partnerships among education, non-profits, community foundations, businesses and government institutions working in tandem.

The HM Government (2024) Plan for Change outlines the current missions and milestones of the UK Government. Donaldson et al (2025) note the primary stakeholders of the drivers of productivity are and how these link to the capitals, this is summarised in Table 1. Table 1 notes how the components of the growth mission link to the capitals and drivers of productivity (with the exception of health and wellbeing that links into the mission to building an NHS fit for future).

Table 1: Drivers of Productivity, Stakeholders, Capitals and Growth Missions

Drivers of Productivity	Primary Stakeholders	Capitals	Government's Mission
Business performance & characteristics	Firms	Intangible Financial Social	Industrial strategy & trade + Innovation
Skills & training	Individuals in the workforce	Human	People: more people into good jobs
Policy & institutions	Government	Institutional Social	Place: devolution & reform
Health & wellbeing	Individuals in society	Human Social	Build an NHS fit for the future
Investment, infrastructure & connectivity	Business environment	Physical Natural	Investment, infrastructure & planning + Net Zero

Source: Donaldson et al (2025) Table A9.2 and HM Government (2024) Plan for Change.

The Government published it UK's Modern Industrial Strategy[3] in June 2025. This is a 10-year plan to increase business investment and grow the industries of the future in the UK. The Strategy outlines eight growth-driving sectors, and has produced sector plans for these, they include: advanced manufacturing; clean energy industries; creative industries; defence; digital and technologies; financial services; life sciences and professional and business services. We assess the strength of each of these in the three boroughs in section 3.

The Productivity Institute's research on the "drivers of productivity", as noted in Table 1, are set out in TPI's Productivity Lab scorecards and dashboards for the London Mayoral Authority (Ortega-Argilés and García Elena, 2025) and London sub-regions (ITL3 Garcia et al, 2024). We present scorecards for the drivers of productivity for Haringey, Enfield and Waltham Forest compared to the London average in section 3.

The Greater London Authority Policy Context

The Upper Lee Valley (ULV) was designated an Opportunity Area in 2004 by the Mayor of London and Greater London Authority (GLA, 2013). Since then, 14,000 new homes have been completed with 31% of these being affordable homes (compared to 25% London average)[4].

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[3] See https://www.gov.uk/government/collections/the-uks-modern-industrial-strategy-2025
[4] See GLA web-site: https://www.london.gov.uk/programmes-strategies/planning/implementing-london-plan/opportunity-areas/londons-opportunity-areas/lee-valley-opportunity-area

It covers 3,884 hectares of land and is shared between the London Boroughs of Haringey, Enfield, Waltham Forest and Hackney.

The Mayor of London announced that the GLA's (2025) London Growth Plan will help to create 150,000 new high-quality jobs by 2028 and make London's economy £107 billion larger by 2035. There are four main ambitions in London Growth Plan. The first is to raise productivity growth rates to 2% average per year over 2025 to 2035 (compared to the 0.12% average annual growth since the financial crisis). The second is to make growth more inclusive and to raise the real household weekly income (after housing costs) of the lowest earning 20% of Londoners by 20% by 2035. This would mean that at least a million London households would have on average an extra £50 to spend each week after paying for housing costs. The third is green growth accelerating progress towards achieving London's net zero target for 2030. The fourth ambition is to grow London's services exports by an average of 6% per year.

In terms of actions within GLA's (2025) growth plan, businesses will be supported by the GLA investing in industrial innovation corridors, and harnessing the growth potential of sectors like AI, life sciences, robotics and clean tech. There is a plan to build skills for the future with GLA's upcoming Inclusive Talent Strategy that will build Londoners skills and help all find good, meaningful work and progress their career. GLA will increase investment into affordable housing and introduce rent-controlled Key Worker homes. Transport infrastructure with be upgraded (noting the Bakerloo Line extension). High streets will be helped to thrive with a £21m investment in 2025, tackling empty properties and ensuring all London boroughs benefit from economic growth.

Investment and Economic Strategies in the Upper Lee Valley

Haringey, Enfield and Waltham Forest are working collaboratively in a Tri-Borough Partnership. During the pandemic these London boroughs worked together to set up the Productive Valley Fund[5] to support businesses in manufacturing, creative and green industries in the Valley area. We will discuss each boroughs economic strategies from their policy documents.

Haringey

Haringey's vision for a fairer, greener local economy that supports inclusive growth and addresses the challenges of economic inequality and sustainability[6]. Haringey is a borough with significant opportunities, rich in creativity and cultural diversity, featuring landmarks like Alexandra Palace and the Tottenham Hotspur Stadium. The local economy faces challenges, including high levels of unemployment, low pay, and economic inequality, particularly in the northeast of the borough. The borough's economy is driven by creative industries, food manufacturing and the retail sector. However, there is a strong need for more inclusive and sustainable economic growth.

The council aims to reshape existing financial support initiatives, such as the Opportunity Investment Fund, to promote sectoral strengths and tackle economic disadvantages. The

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[5] This offers SME loans ranging between £50k-£400k, see: https://www.productivevalleyfund.co.uk//about/
[6] This is from the Opportunity Haringey report at https://haringey.gov.uk/business/business-finance-support/opportunity-haringey

borough seeks to attract new investments, including potential anchor institutions like universities or healthcare facilities, to boost local employment and economic opportunities. Further opportunities include the five following points.

1. Creative and Cultural Industries: Invest in the development of creative industries within Haringey, particularly through supporting shared workspaces and cultural hubs like the Wood Green Cultural Quarter and the Made by Tottenham initiative. Opportunities exist in expanding creative workspaces and leveraging the borough's reputation as a creative hub to attract further investment and talent.

2. High Streets and Town Centres Revitalisation: There are investment opportunities in revitalising high streets and town centres, with a focus on enhancing the retail experience, promoting cultural events, and developing a vibrant evening economy. Investment in retail, leisure, and hospitality sectors, particularly in areas like Wood Green, could benefit from the borough's large and diverse population.

3. Green Jobs and Sustainability: Given the council's commitment to becoming carbon neutral by 2041, there are significant opportunities in the green economy, particularly in retrofitting and low-carbon construction. Investment in training programs and facilities to support green jobs, as well as in the development of sustainable industrial spaces, is highly encouraged.

4. Industrial Estates and Employment Spaces: Investment in upgrading and expanding industrial estates can unlock job creation and support business growth, particularly in sectors like food manufacturing and fashion. There is potential to develop high quality, sustainable employment spaces that meet the needs of both traditional and emerging industries, supported by the Opportunity Haringey Workspace Programme.

5. Visitor Economy and Anchor Institutions: Opportunities exist in attracting a significant anchor institution, such as a university or healthcare facility, which would bring jobs, training opportunities, and increase local spending. Investment in the visitor economy, leveraging Haringey's world-class attractions, and improving infrastructure to enhance the visitor experience can also drive economic growth.

Tottenham Hale's housing zone redevelopment is almost complete[7]. Haringey were awarded £20 million from the Levelling Up Fund to transform the Selby Centre in Tottenham into a new 'urban village', including new community and leisure facilities[8].

Enfield

Enfield is a key area for logistics and distribution due to its strategic location and connectivity within the M25. The following investment opportunities align with Enfield's current socioeconomic needs and aim to drive sustainable economic growth while addressing the borough's key challenges[9].

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[7]   https://www.haringey.gov.uk/placemaking-community-development/tottenham/placemaking-tottenham-hale

[8] https://www.gov.uk/government/case-studies/20-million-to-transform-selby-centre-levelling-up-fund-2

[9] This text is from the Enfield Borough Profile for 2023. For the 2025/26 profile see:
https://www.enfield.gov.uk/__data/assets/pdf_file/0020/109730/Borough-profile-2025-to-2026-Your-council.pdf

1. Affordable Housing Development: There is a strong demand for affordable housing in Enfield, particularly due to rising property prices and rent levels. Investment in developing affordable housing units could meet this demand and address housing inequality.

2. Health and Wellbeing Services: With high rates of chronic health conditions like diabetes and dementia, there is potential for investment in health and wellbeing services, including preventive healthcare, wellness centres, and senior care facilities.

3. Local Business Support and Growth: Opportunities exist to support and grow local micro-businesses, particularly in sectors like retail, health, and education. This could include providing low-cost finance, business mentoring, and creating business hubs or incubators.

4. Sustainable Transport and Green Initiatives: Given Enfield's environmental challenges, investment in sustainable transport solutions (like electric vehicle infrastructure) and green initiatives (such as energy-efficient housing and public spaces) could be highly beneficial.

5. Retail and Town Centre Revitalisation: With significant economic activity concentrated in the retail sector, there are opportunities to revitalise town centres and high streets, making them more attractive for both consumers and businesses. This could involve improving public spaces, promoting local markets, and encouraging a vibrant evening economy.

6. Education and Skills Development: Investment in education and skills development, particularly for young people and those in economically deprived areas, could address employment gaps and improve long-term economic outcomes. This could include partnerships with local schools, colleges, and training providers.

The Lee Valley Heat Network Operating Company Ltd was incorporated in 2015 with Energetik as their trading name and Enfield Council as the sole shareholder. There are plans to set up an Energy Recovery Facility[10] at an Ecopark in Edmonton, Enfield. This facility is the UK's largest District Heat Network with an ambition to supply power to the Meridian Water housing development. There are also plans to extend the network to Wood Green, Tottenham Hale and Broadwater Farm in Haringey (this extension has been funded by a £27.8 million award to Haringey from the Department for Business, Energy & Industrial Strategy).

Enfield's bid to round 2 of the Levelling Up Fund was successful in the subsequent round 3 of funding in 2023. Enfield were awarded £11.9m from DLHUC for town centre improvements in Angel Edmonton[11] to target increases in skills, digital connectivity and well-being.

Meridian Water[12], housing development in Enfield is still in development but is planned to provide 10,000 new homes. New facilities with the site include a new primary school opened in 2017. Also parks, restaurants, community facilities, health and leisure are planned. There is also a target of 6,000 new quality jobs for the site with the establishment of the Troubadour Studios (the first circular economy project on the site) and an Enfield Construction Skills

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[10] An Energy Recovery Facility (ERF) produces energy in the form of electricity, heat or both through the combustion of residual waste. Residual waste (or black bag waste) is the non-recyclable waste that is left after recycling. The facility treats non-recyclable waste as a resource instead of sending it to landfill. See the web-site for more information: https://northlondonheatandpower.london/project/district-heating

[11]   https://letstalk.enfield.gov.uk/angeledmonton/news_feed/11-9-million-levelling-up-funding-for-angel-edmonton

[12]   Countryside Partnerships are the lead homes developer. For more information see: https://www.meridianwater.co.uk/

Academy, providing an integrated engagement programme, outreach and the provision of adult skills training to priority groups supporting local jobs.

Waltham Forest

The following five investment opportunities align with Waltham Forest's economic and environmental goals, driving sustainable growth and addressing local socioeconomic challenges. The borough's economy is heavily reliant on public sector employment, with many local jobs being low paying. There is a significant decoupling between resident and workplace earnings, indicating that many residents work outside the borough. Waltham Forest launched its Inclusive Growth Framework in the summer 2025. The strategy is built on five core pillars: exemplar design, place-based growth, equitable productivity and innovation, relationship-centered approach and community wealth[13]. The framework works in tandem with the council's Social Value Policy 2025–2027[14] and the Infrastructure Delivery Plan.

Business growth in Waltham Forest reflects broader changes in London's economy, with a significant increase in self-employment, particularly in low-income sectors. Industrial areas remain crucial to the local economy, hosting diverse activities, including a growing food and drink manufacturing sector. There has been a significant increase in warehousing and logistics jobs, although this sector poses environmental concerns due to higher emissions.

1. Industrial Development and Modernisation: Invest in upgrading and greening industrial spaces, particularly in areas like Argall Avenue and Blackhorse Lane, to align with decarbonisation goals and attract high-tech manufacturing and sustainable businesses. Explore opportunities to support the growth of the food and drink manufacturing sector, which has seen significant growth in recent years.

2. High Streets and Town Centre Revitalisation: Invest in the development and diversification of high streets and town centres to attract creative industries and professional services. Support the development of affordable office and retail spaces to attract businesses from adjacent boroughs, taking advantage of the lower commercial property values in Waltham Forest. The Town Centre Framework (launched in March 2025) targets five key town centres; Walthamstow, Leytonstone, Leyton, Chingford Mount and North Chingford.

3. Sustainable Housing and Retrofits: Opportunities for investment in retrofitting existing housing stock to improve energy efficiency and reduce carbon emissions, aligning with the borough's climate emergency commitments. Develop new housing projects that incorporate low-carbon construction methods, targeting areas most affected by high housing costs and fuel poverty[15].

4. Transportation and Logistics: Given the growth in warehousing and logistics, there is potential to invest in sustainable logistics solutions that minimize environmental impact, such as green logistics hubs or electric vehicle infrastructure.

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[13] See the minutes of the council meeting at: https://opencouncil.network/meetings/64625.
[14] https://www.walthamforest.gov.uk/sites/default/files/2025-12/Waltham%20Forest%20Social%20Value%20Policy%202025-2027.pdf
[15] For more details see the Waltham Forest Housing Strategy 2025-2029 https://www.walthamforest.gov.uk/housing/housing-strategies-policies-and-guidance/housing-strategies/housing-compact-2024-2029

5. Renewable Energy and Green Technology: Invest in renewable energy solutions, such as solar panels or energy-efficient systems for industrial areas and residential properties, to reduce the borough's reliance on carbon-intensive energy sources. Support the development of green technology businesses within the borough, focusing on reducing emissions from existing industrial and commercial activities.

Waltham Forest secured Levelling Up Funding (LUF) for two projects[16] in 2023. The first of £13.7m was a joint bid with the Transport for London for an upgrade to Leyton station. The second award of £17m was for improvement to public spaces in Walthamstow. The investment forms part of the Council's work with residents, businesses, and stakeholders to develop Walthamstow's cultural offer as a legacy from Waltham Forest being London's first Borough of Culture in 2019. In total Waltham Forest secured £39m of LUF, for Walthamstow town centre, Leyton and Chingford Mount and Highams Park in 2023.

Growth Sectors across the boroughs

The collaboration between the boroughs has strengthened over time with a recent Strategic Business Case been made for a shared resource for Inward Investment for the ULV[17]. The ambition for the shared resource is "to provide an environment focused on attracting, engaging and securing private sector funding to drive inclusive economic growth and sustainable development in the ULV area" (Local Partnerships, 2024).

Higher Education: Waltham Forest welcomed its first University Campus to the borough with the opening of the University of Portsmouth London campus in Walthamstow in May 2024. The campus offers both undergraduate and postgraduate courses, work-based learning opportunities and flexible ways to study. The courses are career-focused and include real-world learning and industry connections. The campus also has the latest learning technology and is designed to be sustainable.

TV and Film: There have been a number of investment opportunities as outlined in the Productive Valley Report (Avison Young, 2022). TV and film companies have invested in large studios in Enfield (Netflix, Troubadour and OMA Studios). It is anticipated that these investments will grow the local supply chain into these industries, strengthening the cultural industries.

UK Innovation Corridor: This initiative aims to foster growth from the Upper Lee Valley towards the East of England linking into Cambridge, Peterborough and Stanstead. This has the potential to bring in more high paying jobs. The Innovation Corridor launched its Investment Prospectus in early 2025[18] and has shown support for the Tri-borough partnership.

Infrastructure investment planned by GLA has now been completed including the Lee Valley Rail programme with track upgrades and a new station at Meridian Water, along with improvement to Tottenham Hale and Northumberland Park stations. This provides improved connectivity between the four major employment/ regeneration areas in the Valley (Lea Bridge, Tottenham Hale, Northumberland Park and Meridian Water) were a key benefit of

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[16] https://www.walthamforest.gov.uk/regeneration-and-growth/regeneration-projects-and-developments/investment-coming-waltham-forest
[17] For more information see the website: https://ulv.london/
[18] https://innovationcorridor.uk/news/uk-innovation-corridor-launches-inaugural-investment-prospectus/

the upgrade that will help to attract further inward investment, particularly as it provides quick connections into London Liverpool Street and Stratford (which have a strong presence of life sciences, tech and creative sectors). This builds on the existing rail links to the Knowledge Quarter in Camden, via Blackhorse Lane/ Tottenham Hale.

All boroughs face significant challenges related to poverty, inequality, and barriers to economic participation. Rising housing costs and the cost-of-living crisis are putting even multi-earner professional households at risk of poverty. There are notable disparities in economic opportunities and educational attainment across different areas of the three boroughs as noted by the Index of Multiple Deprivation maps, see the human capital section.

3. Economic Performance and Sector Specialisation

Productivity in the three London boroughs is lower than the London average level (though Enfield is above the UK average). Growth in productivity over time has stalled due to subdued output growth but also a good recovery in jobs and working hours since the financial crisis of 2008[19].

Table 2: Upper Lee Valley, London Boroughs Economic Performance Compared

Indicator	Year	Haringey	Enfield	Waltham Forest	London	GB (UK)
1.Population (Census)	2021	264,200	330,000	278,400	8,804,800	65,121,700
2.Productivity (£, GVA per hour)	2022	28.6	43.8	35.5	50.6	39.7 (UK less ExRegio)
3.Employees PAYE, resident	Nov. 2024	132,464	145,723	136,606	4,370,611	30,386,608 (UK)
4.Businesses (Enterprises)	2024	12,905	14,825	11,925	525,855	
5.Businesses (Local Units)	2024	14,010	16,195	12,935	584,415	
6. Job Density	2022	0.57	0.61	0.49	1.07	0.87
7.Full-time	2023	64.4%	65.5%	69.2%	74.2%	68.8%
8.Part-time	2023	35.6%	34.5%	30.8%	25.8%	31.2%
9.Employment rate (16-64)	2024	73.9%	67.9%	73.7%	74.6%	75.8%
10.Unemployed (% of econ. active 16+)	2024	5.8%	5.6%	5.3%	5%	3.7%
11.Inactivity (16-64 yrs)	2024	24.1%	29.7%	24.1%	21.4%	21.2%

Source: the data are from Nomis Local Authority Profiles https://www.nomisweb.co.uk/.

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[19] This indicates that wages were slow to recover, see: https://www.centreforcities.org/blog/londons-lost-decade/

Economic performance indicators from the Office for National Statistics (ONS)[20] and population are presented in Table 2 comparing the three boroughs to the London and national average. Compared to the other TBP boroughs, Enfield has the largest population and job density along with the highest productivity (Gross Value Added, GVA/ hour, though all boroughs are below the London average) and weekly pay for workers in the borough. Enfield has the lowest employment rate of the boroughs and the highest share of inactivity population between 16-64 year olds.

Haringey has the highest gross weekly pay for residents, Gross Disposable Household Income (GDHI) per head and the highest employment rate for 16-64 year olds, but the lowest productivity. Waltham Forest has the lowest job density and a productivity level below the UK level.

In the appendix, Figure A.1 maps GVA across the three boroughs by Middle Super Output Areas (MSOA, with labels for place names in Table A1) in 2019. This gives an indication of where higher value businesses and major industrial locations are located.

Figure 1: The Upper Lee Valley Productivity, Prosperity and Income
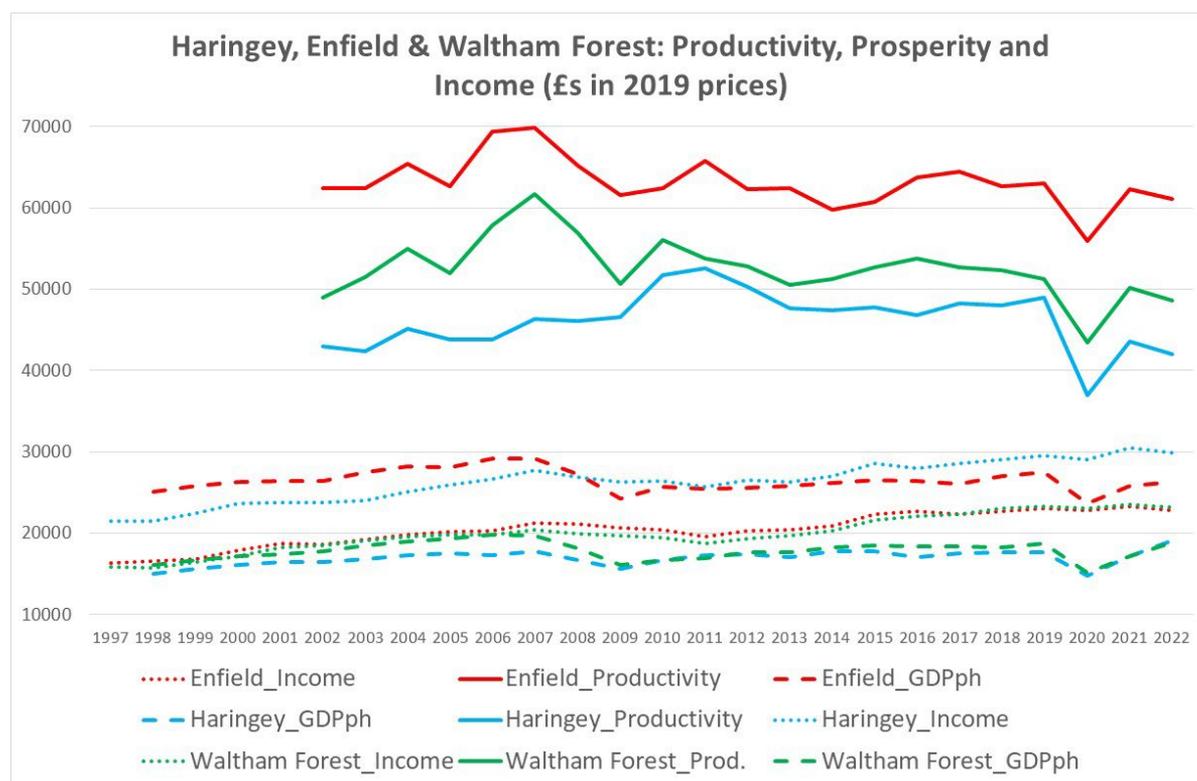
Source: ONS (2024e) Local Authority Productivity and ONS (2024c) for sub-regional GDP.

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[20] The ONS present local indicators for all UK local authorities, these can be found for Haringey: https://www.ons.gov.uk/explore-local-statistics/areas/E09000014-haringey/indicators; Waltham Forest: https://www.ons.gov.uk/explore-local-statistics/areas/E09000031-waltham-forest/indicators and Enfield: https://www.ons.gov.uk/explore-local-statistics/areas/E09000010-enfield/indicators

Figure 1 compares the borough's productivity and prosperity over time. Here, prosperity is measured by Gross Domestic Product[21] (GDP) per head, productivity by GVA per job and income by GDHI per head (deflated by CPIH, the Consumer Prices Index including owner-occupiers' Housing costs). To gauge the impact of the 2008 and Covid-19 recessions on the Upper Lee Valley boroughs Tables A2-A4 in the appendix present business cycle turning point dates for the with some summary statistics showing the average growth rates of sub-samples before and after the recessions. We find that productivity growth has stalled in London since the 2008 crisis with Figure A3 for productivity (GVA/hour) set to 2008=100 showing London's level in 2022 below 100. In the borough scorecards (Tables A5-A7) long-term average annual growth since 2008 is for London -0.2% with only Enfield (of the three boroughs) experiencing positive productivity growth since 2008 of 0.4%, compared to 0.6% for the UK.

Figure 2: London Productivity Levels vs. Growth Rates (2008-2022)
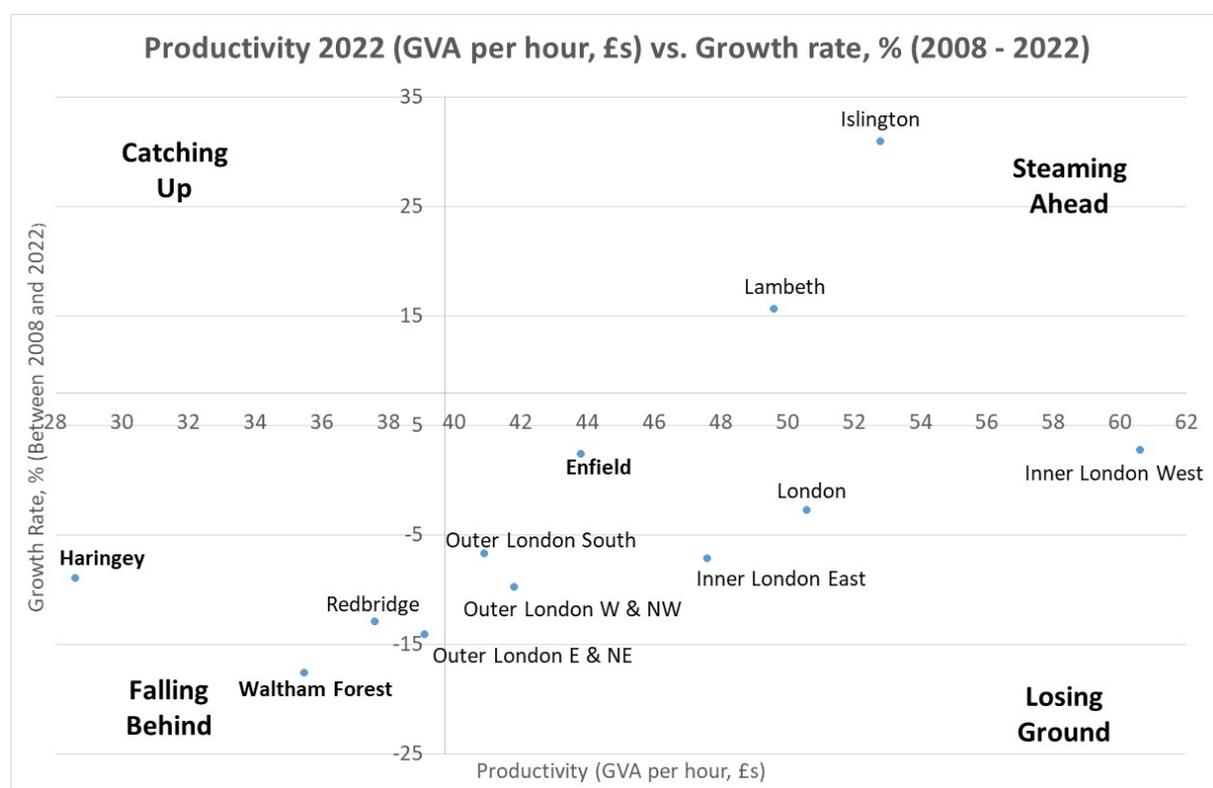
Source: Productivity Levels from Table A3 in ONS (2024e), growth rates calculated from Table A5.

We compare productivity levels versus the growth rate in the Figure 2 for London and its ITL2 level sub-regions along with boroughs of Haringey, Enfield, Waltham Forest, Redbridge,

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[21] GDP measures the value of goods and services produced. It estimates the size of the economy. GDP is equivalent to GVA plus Value Added Tax (VAT) plus other taxes on products less subsidies on products. GDP per head is calculated as GDP divided by the resident population in an area.

Islington and Lambeth[22]. The chart's axis is set at the UK average with productivity level of £39.7 (GVA per hour worked) in 2022 and growth rate (for the constant prices productivity series) of 8% between 2008 to 2022. The chart shows a four-type taxonomy[23] to describe how the sub-regions are progressing compared to the UK average.

In Figure 2 we can see that Enfield's level of productivity at £43.8 is above the UK level of £39.7 but that since 2008 it has increased to 2022 by 2.4%, less than the UK growth of 8%, so it is in the losing ground quadrant of the figure. Waltham Forest (£35.5) and Haringey's (£28.6) level of productivity are below the UK average and they have both declined compared the 2008 levels, Waltham Forest by -17.6% and Haringey by -8.9% between 2008 to 2022, so they are in the falling behind quadrant. The boroughs of Islington and Lambeth have higher productivity levels and had higher than UK average growth so they are steaming ahead.

Drivers of Productivity

The Productivity Lab scorecards examine four regional productivity drivers: business performance, skills and training, health and well-being, and investment and infrastructure. We set out economic variables and the drivers of productivity in a scorecard for UK productivity and each of the boroughs in Tables A5-A7 with short-term growth (growth rate for 2021-2022), medium-term growth (average of annual growth rates between 2017 to 2022) and long-term growth (average of annual growth rates between 2008 and 2022). The UK productivity level is £39.7 in 2022 with a 0.1% positive growth rate since 2021, then has an average growth rate of 0.7% per year in the medium term and 0.6% per year in the long term.

In the economy measures for Haringey in Table A5 we see that productivity (GVA per hour and GVA per filled job) and output (GDP per capita) are below the London levels in 2022 (the London level are in brackets). Gross Disposable Household Income (GDHI) per head in Haringey is above the London level in 2022. This could reflect the higher income of working residents who commute out of the borough (see Table A8 for worker flows during the 2021 Census), with Westminster the most popular work destination for commuters. Productivity growth has been falling over time but GDP per head has been increasing. The falling productivity (GVA per hour) growth rate over time is due to the increase in employment and hours worked since the financial crisis in 2008 (shown in Figures A5 and A6 in the appendix) along with the flat-lining of output growth for Haringey since 2016 (see Figure A4).

Business performance indicators show that Haringey and Islington have a high export intensity, particularly in services, although this has slightly declined (see Table A5). Haringey has a higher-than-average rate of new business creation, though business births have recently fallen. In terms of skills, Haringey lags behind London in the share of residents with high-level qualifications and has a slightly higher proportion of people with no qualifications.

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[22] We include Islington as this is part ITLI43 level 3 region along with Haringey. Redbridge makes up ITLI53 with Waltham Forest. Lambeth is an example of a borough steaming ahead.
[23] The taxonomy is based on the method from García et al, (2024) Productivity Lab Scorecards. Latest release: https://www.productivity.ac.uk/the-productivity-lab/the-2025-tpi-uk-itl3-productivity-scorecard-series/

However, its employment rate is above the London average and increasing. Health and wellbeing indicators show a lower activity rate in Haringey, though it is improving, and the share of inactive individuals due to ill health matches the London average. The borough has a higher proportion of working-age residents, though this is declining. On infrastructure, Haringey and Islington have strong 4G coverage but weaker fibre connectivity, and while intangible investment per job is above average, overall investment trends are declining.

In 2022, Enfield's economic indicators in Table A6—including productivity, output per capita, income per head, and weekly pay—were all below the London average. While output per capita and income have shown growth over the medium and long term, productivity growth has declined due to weak output performance since 2008 and a significant hit during the COVID-19 pandemic. A fall in hours worked since 2017 temporarily boosted productivity in that year. Export intensity in Enfield was low at 17.1% in 2022, well below London's 41.9%, largely due to limited service exports. The rate of new business creation was slightly above the London average, but business births declined by 4% from 2021.

Enfield also lags behind in skills, with only 48.1% of the working-age population holding high-level qualifications and 10.2% having no qualifications—both worse than London averages. The borough's activity rate was 75.3%, lower than London's 82.9%, though it has improved recently. Ill health-related inactivity rose to 24%, slightly above the London average. The working-age population share is also lower and declining. Infrastructure indicators show average 4G coverage but very low fibre connectivity (5.1% vs. 43.6% in London). While overall and intangible investment per job are below London levels, ICT investment is higher, and investment growth has been increasing in the medium and long term. There is more information on investment in Enfield in the physical capital section.

Waltham Forest's economic indicators in 2022 shown in Table A7—productivity, output per capita, income per head, and weekly pay—were all below the London average. However, output per capita and income have been rising over the medium and long term. Productivity growth has declined due to weak output growth since 2008 and a rise in hours worked. Export intensity data is unavailable due to confidentiality, but the borough had a relatively high business birth rate of 14.7%, above the London average, although new business formation declined slightly by 1.2% from 2021.

Waltham Forest also trails London in skills, with 54.1% of the working-age population holding high-level qualifications and 8% having no qualifications. The activity rate is lower than London at 74.8% and has declined recently, though on a positive note the share of inactivity due to ill health is notably lower than the London average. The working-age population share is relatively high at 69.2% but is gradually declining. In terms of infrastructure, 4G coverage is below the London average, while fibre connectivity is slightly better. Investment per job across all categories is below London levels, with long-term growth positive but short- and medium-term trends negative.

Industrial Strategy Sector Strengths

Historically, the three areas have a rich industrial heritage, with several key points which have shaped the current social and economic condition found in the boroughs. These include, the strong historic representation of fashion and textile sectors in Tottenham, Haringey; the world-famous lamp works in Edmonton, Enfield; and the furniture, glass and textile designs of William Morris from Waltham Forest. Finally, the Upper Lee Valley as a whole, is notable as an area of major and dense industrial activity for over 50 years, particularly in the areas of small arms, flour milling, porcelain production, chemicals and electrical goods.

To gauge the Government's industrial strategy eight sector strengths for companies in the Upper Lee Valley, we present analysis by The Data City using their Real-time Standard Industrial Classification (RTICs) codes gathered from searching firms' websites for sector keywords. We compare the Upper Lee Valley to a selection of neighbouring boroughs.

Table 3: Upper Lee Valley Companies Industrial Strategy Sector's Location Quotients

IS-8 Sector	AM	CE	CI	D	DT	FS	LS	PBS
Haringey	**0.38**	**0.19**	**0.91**	**0.4**	**0.48**	**0.31**	**0.51**	**0.62**
Enfield	**0.47**	**0.47**	**0.66**	**0.43**	**0.49**	**0.4**	**0.57**	**0.6**
Waltham Forest	**0.43**	**0.24**	**0.82**	**0.39**	**0.41**	**0.31**	**0.34**	**0.58**
Islington	0.51	0.92	1.44	1.53	1.05	0.99	0.55	1.0
Redbridge	0.29	0.28	0.56	0.55	0.43	0.37	0.53	0.51
Lambeth	0.43	1.2	1.37	0.67	0.95	0.61	1.12	0.89
Hackney	0.42	0.4	1.35	1.13	1.06	0.58	0.45	0.84
Newham	0.33	0.32	0.66	0.58	0.48	0.41	0.43	0.52
Tower Hamlets	0.46	0.77	1.37	1.65	1.32	2.66	0.72	1.16
Barnet	0.44	0.29	0.86	0.63	0.56	0.66	0.68	0.67

Source: The Data City Real Time SIC Codes, https://thedatacity.com/real-time-sic-codes/. Key to sectors: Advanced Manufacturing (AM); Clean Energy (CE) Industries; Creative Industries (CI); Defence (D); Digital and Technology (DT); Financial Services (FS); Life Sciences (LS); Professional and Business Services (PBS). The Data City indicators are from July 2025.

Table 3 shows the specialisation in the eight priority sectors outlined in the Government's Modern Industrial Strategy 2035 across ten boroughs. The location quotients (LQ) are calculated by taking the number of operating addresses of companies classified in the sectors (company counts) as input data. A location quotient greater than one shows the borough has a greater strength in that sector than the UK average. From Table 3 we see that the Upper Lee Valley borough's highest specialisation is in the creative industries, followed by professional and business services.

To understand the relative specialisation for the employee sectors in the ULV, compared to Great Britain (GB), we calculate LQ using the Business Register Employment Survey. Again, here a location quotient greater than one indicates higher specialisation than the GB level of employees in that sector. Table 4 shows the highest 18 location quotients for Haringey employee sectors at the 2-digit SIC code level (average between 2015-22) along with the employee numbers in 2015, 2022, the 2022 employee sector share and the growth rate between 2015 and 2022.

Table 4: Haringey Highest Location Quotients & Largest Employee Sectors

Sectors for Haringey	2015	2022	Share in 2022	Growth Rate 2015-2022	Location Quotient 2015-22 average
14: Manufacture of wearing apparel	1750	450	0.6	-74.3	11.95
92: Gambling and betting activities	800	1250	0.81	-16.7	5.68
90: Creative, arts and entertainment activities	600	700	0.94	16.7	3.12
15: Manufacture of leather and related products	30	100	0.13	233.3	2.66
59: Motion picture, video & television programme production, sound recording & music publishing activities	600	800	1.08	33.3	2.60
49: Land transport and transport via pipelines	3000	3000	4.04	0	2.41
74: Other professional, scientific and technical activities	450	600	0.78	33.3	2.13
68: Real estate activities	2000	3000	4.04	50	2.05
41: Construction of buildings	1000	2500	3.37	150	1.669
18: Printing and reproduction of recorded media	500	300	0.4	-40	1.664
96: Other personal service activities	1000	1250	1.69	25	1.54
56: Food & beverage service activities	6000	8000	10.8	33.3	1.48
47: Retail trade, except of motor vehicles and motorcycles	10000	10000	13.5	0	1.43
33: Repair and installation of machinery and equipment	300	350	0.47	16.7	1.39
46: Wholesale trade, except of motor vehicles and motorcycles	3500	3500	4.72	0	1.225
85: Education	9000	8000	10.8	-11.1	1.22
38: Waste collection, treatment and disposal activities; materials recovery	400	450	0.61	12.5	1.21
95: Repair of computers and personal and household goods	75	300	0.4	300	1.16
Total Haringey Employees	68525	74180	100	8.25	

Source: Business Register Employment Survey from Nomis https://www.nomisweb.co.uk/ at the 2 digit level Standard Industrial Classification code.

In Table 4 we can see that the number of employees in Haringey has increased by 8.3% between 2015 and 2022. The largest location quotient is for the manufacture of wearing apparel (LQ of 11.95), followed by gambling and betting activities (LQ of 5.68) and then creative arts and entertainment activities (LQ of 3.1). Employees in the creative arts have grown between 2015 and 2022 by 16%, along with a number of other sectors including

growth in manufacture of leather products (growth from 30 to 100 employees), and in the motion picture, other professional services, real estate, construction and repair of computers. The largest shares of employees in 2022 (13.5%) were in retail trade along with food and beverage services (10.8% share, this sector grew by a third).

Table 5: Enfield Highest Location Quotients & Largest Employee Sectors

Sectors for Enfield	2015	2022	Share in 2022	Growth Rate (%) 2015-2022	Location Quotient 2015-22 average
14: Manufacture of wearing apparel	900	300	0.27	-66.7	5.17
37: Sewerage	350	200	0.18	-42.9	2.34
11 : Manufacture of beverages	250	400	0.36	60	1.94
52: Warehousing & support activities for transportation	2500	4000	3.59	60	1.73
92: Gambling and betting activities	450	500	0.45	11.1	1.65
41: Construction of buildings	1500	3500	3.14	133.3	1.63
46: Wholesale trade, except of motor vehicles and motorcycles	6000	7000	6.29	16.7	1.61
80: Security and investigation activities	1250	1000	0.9	-20	1.56
81: Services to buildings and landscape activities	4500	3500	3.14	-22.2	1.53
49: Land transport and transport via pipelines	2250	3000	2.69	33.3	1.44
10: Manufacture of food products	1250	2000	1.8	60	1.40
96: Other personal service activities	1250	1750	1.57	40	1.36
43: Specialised construction activities	2500	3500	3.14	40	1.32
42: Civil engineering	1250	700	0.63	-44	1.31
95: Repair of computers and personal and household goods	150	350	0.31	133.3	1.30
47: Retail trade, except of motor vehicles and motorcycles	13000	13000	11.7	0	1.29
38: Waste collection, treatment and disposal activities; materials recovery	350	1000	0.9	185.7	1.28
85: Education	12000	11000	9.9	-8.3	1.17
86: Human health activities	10000	10000	9	0	1.15
68: Real estate activities	2250	2250	2.02	0	1.06
59: Motion picture, video & television programme production, sound recording & music publishing activities	300	450	0.4	50	0.91
Total Enfield Employees	102340	111325	100	8.78	

Source: Business Register Employment Survey from Nomis https://www.nomisweb.co.uk/ at the 2 digit level Standard Industrial Classification code.

Table 6: Waltham Forest Highest Location Quotients & Largest Employee Sectors

Sector for Waltham Forest	2015	2022	Share in 2022 (%)	Growth Rate (%) 2015-2022	Location Quotient 2015-22 average
80: Security & investigation activities	5000	6000	7.8	20	11.4
95: Repair of computers and personal and household goods	50	3500	4.5	6900	4.03
14: Manufacture of wearing apparel	400	125	0.16	-68.8	2.94
49: Land transport and transport via pipelines	3000	2500	3.24	-16.7	2.45
18: Printing and reproduction of recorded media	600	125	0.16	-79.2	1.83
96: Other personal service activities	1250	1250	1.62	0	1.58
92: Gambling and betting activities	350	300	0.39	-14.3	1.55
41: Construction of buildings	1000	2500	3.24	150	1.54
74: Other professional, scientific and technical activities	450	600	0.78	33.3	1.49
85: Education	10000	9000	11.7	-10	1.46
38: Waste collection, treatment and disposal activities; materials recovery	300	600	0.78	50	1.41
46: Wholesale trade, except of motor vehicles and motorcycles	3500	3500	4.53	0	1.34
59: Motion picture, video & television programme production, sound recording & music publishing activities	175	450	0.58	157.1	1.33
36: Water collection, treatment and supply	100	150	0.19	50	1.29
43: Specialised construction activities	1250	2250	2.91	80	1.24
90: Creative, arts and entertainment activities	150	350	0.45	133.3	1.22
47: Retail trade, except of motor vehicles & motorcycles	8000	8000	10.4	0	1.18
68: Real estate activities	1500	1500	1.94	0	1.123
86: Human health activities	6000	7000	9.1	16.7	1.116
Total Waltham Forest Employees	68635	77230	100	12.5	

Source: Business Register Employment Survey from Nomis https://www.nomisweb.co.uk/ at the 2 digit level Standard Industrial Classification code.

Enfield's location quotients for employee sector specialisation are in Table 5. Between 2015 and 2022 the number of employees in Enfield has increased by 8.8%. The largest location quotient is for the manufacture of wearing apparel (LQ of 5.17), followed by sewerage (LQ of 2.34) and then the manufacture of beverages (LQ of 1.94). Employees in construction have grown from 1,500 in 2015 to 3,500 in 2022, possibly boosted by the Construction Skills Academy. Other growth sectors include warehousing, wholesale trade, land transport,

gambling activities, waste collection, motion picture activities and repair of computers. The largest shares of employees in 2022 (11.7%) was in retail trade along with education the next largest sector (this sector contracted between 2015 and 2022 by 8.3%).

The location quotients for Waltham Forest employee sector specialisations are in Table 6. Between 2015 and 2022 the number of employees in Waltham Forest has increased by 12.5%. The largest location quotient is for security and investigation activities (LQ of 11.4), followed by repair of computers (LQ of 4.03) and then the manufacture of wearing apparel (LQ of 2.94). Employees in the repair of computers have grown from 50 in 2015 to 3,500 in 2022. Other growth sectors include motion pictures, creative activities, security, construction, other professional services and waste collection. In Waltham Forest the share of employees in land transport, education, printing and gambling activities has contracted. The largest shares of employees in 2022 (11.7%) were in education with retail trade the next largest sector.

Table 7: Upper Lee Valley Gross Value Added Shares of Sectors in 2022

Sector	Haringey	Enfield	Waltham Forest
ABDE: Agriculture, mining & utilities	0.50	2.49	0.75
C: Manufacturing	5.63	6.40	3.35
J: Information & communication	2.25	5.17	6.21
K: Financial & insurance activities	1.41	1.16	0.70
R: Arts, entertainment & recreation	5.65	2.39	2.41
S: Other service activities	1.89	1.71	1.95
T: Activities of households	0.36	0.18	0.26
Share of Tradeable Sectors	**17.70**	**19.49**	**15.64**
F: Construction	4.72	11.98	7.85
G: Wholesale & retail trade	5.65	10.51	10.88
H: Transportation & storage	5.17	5.74	3.61
I: Accommodation & food services	3.86	1.79	3.77
L: Real estate activities	36.78	24.76	29.14
(Owner-occupiers' imputed rental)[24]	(28.7)	(16.6)	(24.6)
(Excluding imputed rental)	(8.0)	(8.1)	(4.5)
M: Professional, scientific & technical	2.78	3.30	3.47
N: Administrative & support services	2.52	4.46	4.59
O: Public administration & defence	5.65	2.76	3.82
P: Education	8.43	5.24	7.20
Q: Human health & social work	6.66	9.99	10.06
Total GVA in 2022 (£ million)	**4523**	**7886**	**4627**

Source: ONS (2024d) Regional GVA (balanced) by industry.

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[24] ONS use imputed rental data to estimate the housing services that households consume when they do not rent their residence. Imputed rent is the rental price that an individual would pay for an asset they own. The methodology ONS use to calculate imputed rent uses the share of the different types of housing stock multiplied by median house prices of an area. In Table 8 a large share of sector L (real estate activities) of GVA is reported in London, this is due to house prices generally being higher.

The OECD (2016) found that regions with larger tradeable sectors[25] were able to catch up to the frontier regions quicker than those regions with lower shares that were diverging. Tradeable sectors bring money into the community, together with the wages of residents who commute to other parts of the city-region. We calculate the share of tradeable sectors in the three boroughs in Table 7 we analyse the Gross Value Added (GVA) sector shares for 2022. It is important to note that all boroughs have large shares of real estate activities. This is due to the way ONS calculates the value of residential housing services consumed by imputed rent (see footnote 24) which is due to higher property prices in London.

Enfield has the largest share of tradeable sectors at 19.5% of GVA, Haringey has a 17.7% share classed as tradeable and Waltham Forest has 15.6%. Waltham Forest has a substantial and growing information and communication sector of 6% of the economy, along with a growing number of employees in the computer repair sector and highlighted in Table 6. Both Haringey and Enfield have substantial manufacturing sectors of around 6% of the share of GVA, Waltham Forest has a share of 3.3% but this has been contracting over time.

4. The Capital Assets

A key driver of productivity levels and growth rates is the availability of capital assets (Becker and Martin, 2023). Capital is an input into a production process along with labour (which can then be utilised to estimate multi-factor productivity in a production function). Capital can be both a substitute and complement to other factors of production. For example, capital assets can enable automation and replacement of workers, and/or greater availability of capital assets per worker can enable improved efficiency of production. We now turn to a brief explanation of each of the seven capitals and provide examples of them in the London boroughs.

Physical Capital

Physical capital accounts for the tangible or fixed assets that contribute to making firms and places productive (see Becker and Martin, 2023). These include assets that play a direct role in the production process, such as such as buildings, machinery, and transport equipment. These physical capital assets improve productivity by providing people with better tools and better environments in order to complete tasks, and so a greater stock of physical capital will typically lead to a greater level of production.

Physical capital also includes the infrastructure – such as trains and water pipes – that play a more indirect role in production. Infrastructure facilitates a greater range of activities by connecting people and removing barriers to economic activity. For example, infrastructure provides firms with the means to transport goods, but better connectivity creates a wider

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[25] The OECD (2018) classifies tradeable sectors as the following: agriculture (A), industry (BCDE), information and communications (J), financial and insurance activities (K) and other services (RSTU). The remaining sectors are then classed as non-tradeable. The OECD defines tradeable sectors as "those that produce goods and services that can traded across regions and international borders". Firms can operate in sectors that are tradeable, although they may not actually engage in trade, but they are exposed to competition from abroad. See Chapter 2, page 59 in OECD (2018).

population base from which to draw its employees. Creation of new infrastructure increase economic activity in construction employment and new job opportunities running services.

In the UK, whole economy investment is called Gross Fixed Capital Formation (GFCF, see ONS, 2022). GFCF includes investment in dwellings, other buildings and structures, machinery and equipment including ICT equipment and transport equipment, and some intangible assets including software. Within whole economy investment is business investment, this excludes expenditure on dwellings and the cost associated with the transfer of ownership of non-produced assets and capital expenditure by local and central government (ONS, 2024b).

Where GFCF exceeds the depreciation and retirement of existing capital, net capital formation will be positive, resulting in an increase in the net capital stock. As well as measuring the value of capital stock, it is possible to measure the flow of capital services, these are more heavily weighted to shorter-lived assets. This is because a long-lived asset, like a building, might be worth a lot but delivers a smaller fraction of its value each year. A laptop is worth much less than a building but delivers its services over a shorter period, and therefore a larger fraction of value each year. The capital stock is effectively a 'wealth' measure. We want to know how much benefit there is from the capital for production over time, hence giving more weight to assets that we use more intensively over a shorter life.

As the ONS (2022) GFCF release is not available for local authorities but is for ITL3 regions we present data for London and Enfield. In Table 8 GFCF is approximately 20% of GVA in 2020 (and for Enfield). The total amounts and shares of GFCF in 2020 are shown, in Enfield the other buildings and structures series represents over a half of the buildings and structures asset grouping. We compare the time series of asset types for London and Enfield in the charts below over time in constant prices[26].

Table 8: Whole Economy Investment for London & Enfield in 2020

	London		Enfield	
	Shares (%)	Amounts (£ millions)	Shares (%)	Amounts (£ millions)
Whole Economy Investment (Total GCFC)		79842.71		1106.76
Buildings and structures	58.4	46592.75	54.0	598.13
(Other Buildings & Structures)	(30.5)	(24323)	(32.5)	(360)
Transport equipment	3.1	2457.63	2.3	25.85
ICT equipment	4.2	3343.77	7.6	83.65
Other tangible assets	10.2	8157.52	17.9	198.33
Intangible assets	24.1	19268.06	17.8	196.71

Source: ONS (2022) with other buildings and structure from ONS (2023b).

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[26] The series are deflated by the London ITL1 GFCF deflator and Enfield by the ITL2 GFCF deflator for Outer London – East and North East from Becker and Martin (2023) available on the TPI web-site at: https://figshare.manchester.ac.uk/articles/dataset/Regional_capital_investment_deflators_UK_by_industry_and_asset_1997_to_2019/24065550

Figure 3: London Market & Whole Economy Investment (GFCF) by Asset Groupings

Figure 3: London Market & Whole Economy Investment (GFCF) by Asset Groupings

Figure 4: Enfield Market & Whole Economy Investment (GFCF) by Asset Groupings
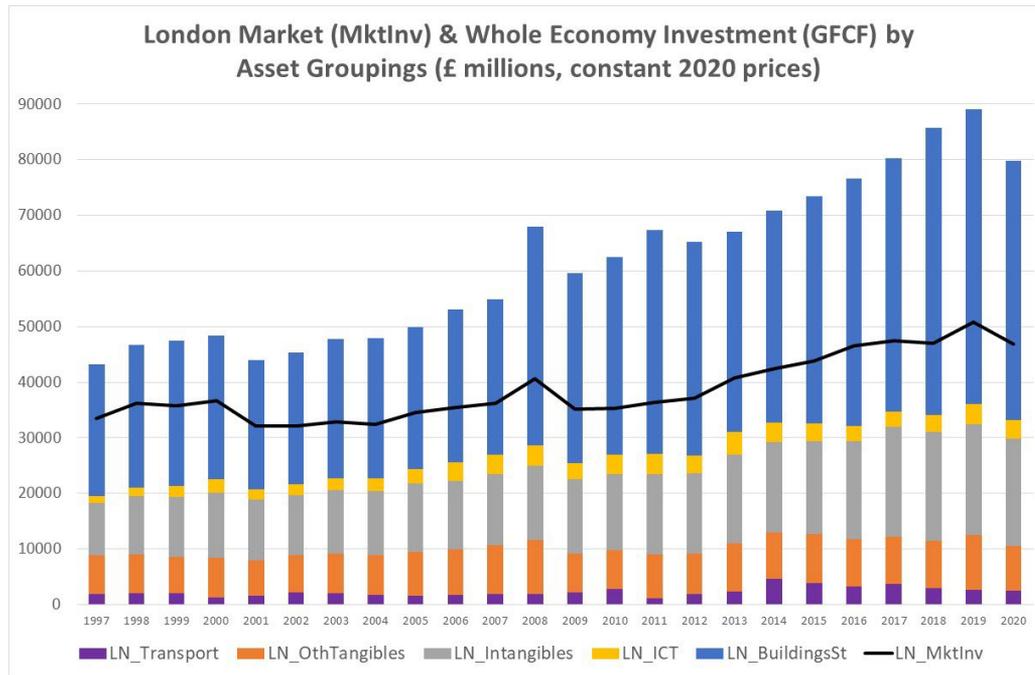
Figure 4: Enfield Market & Whole Economy Investment (GFCF) by Asset Groupings
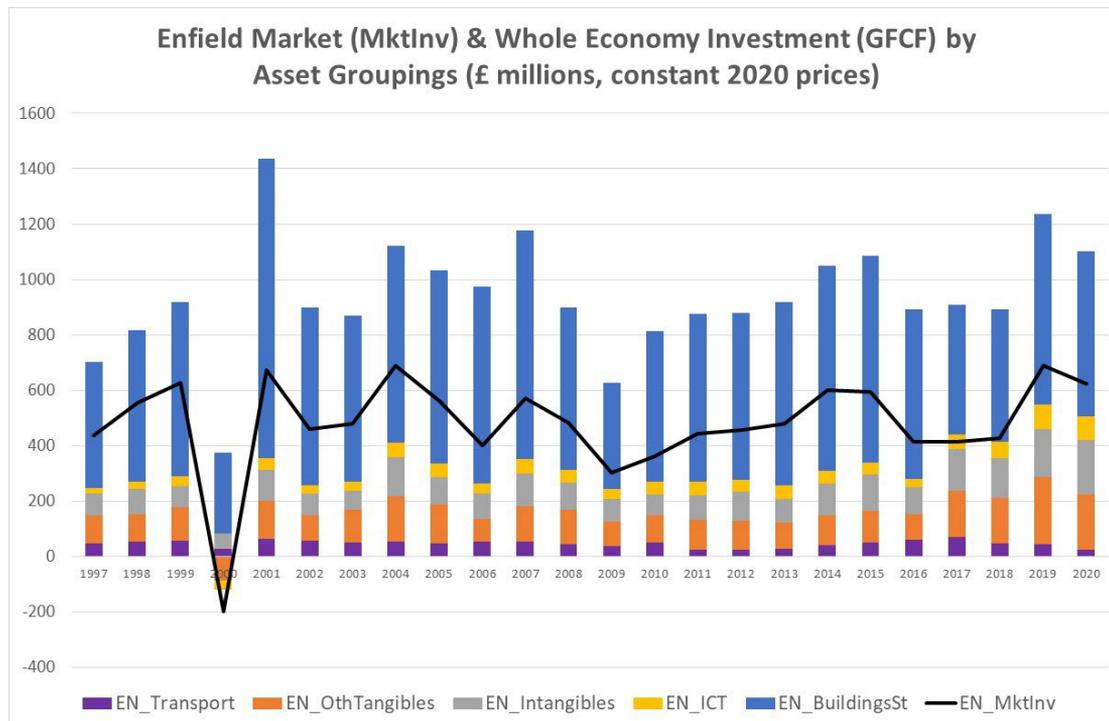
The GFCF series in current prices for London and Enfield in ONS (2022) are also available for industry sectors. Becker and Martin (2023) calculate a regional business investment series (total investment less government and dwellings investment). They approximate business investment by excluding industries that are predominantly non-market, so remove public administration and defence (SIC 2007 section O), education (section P) and health and social

care (section Q) industries, which are largely government-run industries in the UK. They exclude the real estate industry (section L) in order to exclude investment in the dwellings asset (allocated only to the real estate industry). They refer to this estimate as 'market sector' investment and we calculate this for London and Enfield, the black line in Figures 3 and 4 (MktInv, also deflated so in constant prices).

In Table 9 we compare the growth rates over time for market sector and whole economy investment (plus the asset groups). We see a steady increase for London whole economy and market economy investment, with greater average growth rates before the financial crisis (pre-2009). The strong average growth rates for Enfield (for the full sample and pre-2009) are due to a large fall in the level of investment in 2000 followed by a large increase. After this investment increases at a steady rate though lower than London as a whole, though Enfield experiences higher growth rates for the last 3 years. Becker and Martin (2023) note capital investment is an inherently 'lumpy' variable, as it can be influenced by one large investment project. Intangible assets average growth rates are positive for Enfield over the whole sample, these are important for increasing productivity. We also see positive average annual growth rates over the most recent sub-samples 2009-2020 for ICT equipment in Enfield.

Table 9: Comparison of Investment Assets, average growth rates over time

London	1998-2020	1998-2008	2009-2017	2018-2020
Total GFCF	3.01	4.58	2.08	0.07
Market Sector Investment	1.67	1.95	1.95	-0.19
Buildings and structures	3.50	5.36	1.95	1.31
Transport equipment	5.58	1.34	16.70	-12.22
ICT equipment	5.35	10.66	-1.93	7.74
Other tangible assets	1.32	3.44	-0.63	-0.63
Intangible assets	3.29	3.37	4.60	-0.90
Enfield	1998-2020	1998-2008	2009-2017	2018-2020
Total GFCF	28.18	55.24	1.61	8.63
Market Sector Investment	-20.53	-48.52	0.75	18.23
Buildings and structures	10.62	19.24	-0.06	11.05
Transport equipment	3.09	5.60	9.92	-26.58
ICT equipment	-8.29	-26.79	5.64	17.75
Other tangible assets	-12.72	-34.77	6.98	9.05
Intangible assets	9.11	10.30	7.35	9.98

Source: ONS (2022) Experimental GFCF by asset group and GFCF deflators from Becker and Martin (2023).

House Prices and Affordability

According to the House of Commons Briefing Paper (Barker, 2018)[27] the majority of Enfield 99.6% is classified as part of the London core city, with the Haringey and Waltham Forest also in the London core city. Enfield has three parliamentary constituencies with Edmonton the

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[27] The House of Commons Briefing paper, Baker (2018), sets out town and city classifications for parliamentary constituencies and local authorities.

largest with approximately 36% of the population, Enfield North with 33% and Enfield, Southgate with 31% of the population. Haringey borough has two constituencies, Tottenham covers 52% of the population and Hornsey and Wood Green the remaining 48%.

The borough of Waltham Forest includes the constituency of Walthamstow covering approximately 43% of the population with the remaining constituencies of Chingford and Woodford Green and Leyton and Wanstead shared with Redbridge borough[28]. Figure A2 shows the map of the three boroughs median house prices by Middle Supper Output Area (MSOA) in the appendix with the list of MSOA place names in Table A1. Figure 5 shows the median house price series for constituencies.

Figure 5: Upper Lee Valley Boroughs, median house prices time series by constituencies

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[28] See https://www.londoncouncils.gov.uk/who-runs-london/general-election/constituencies-and-boroughs
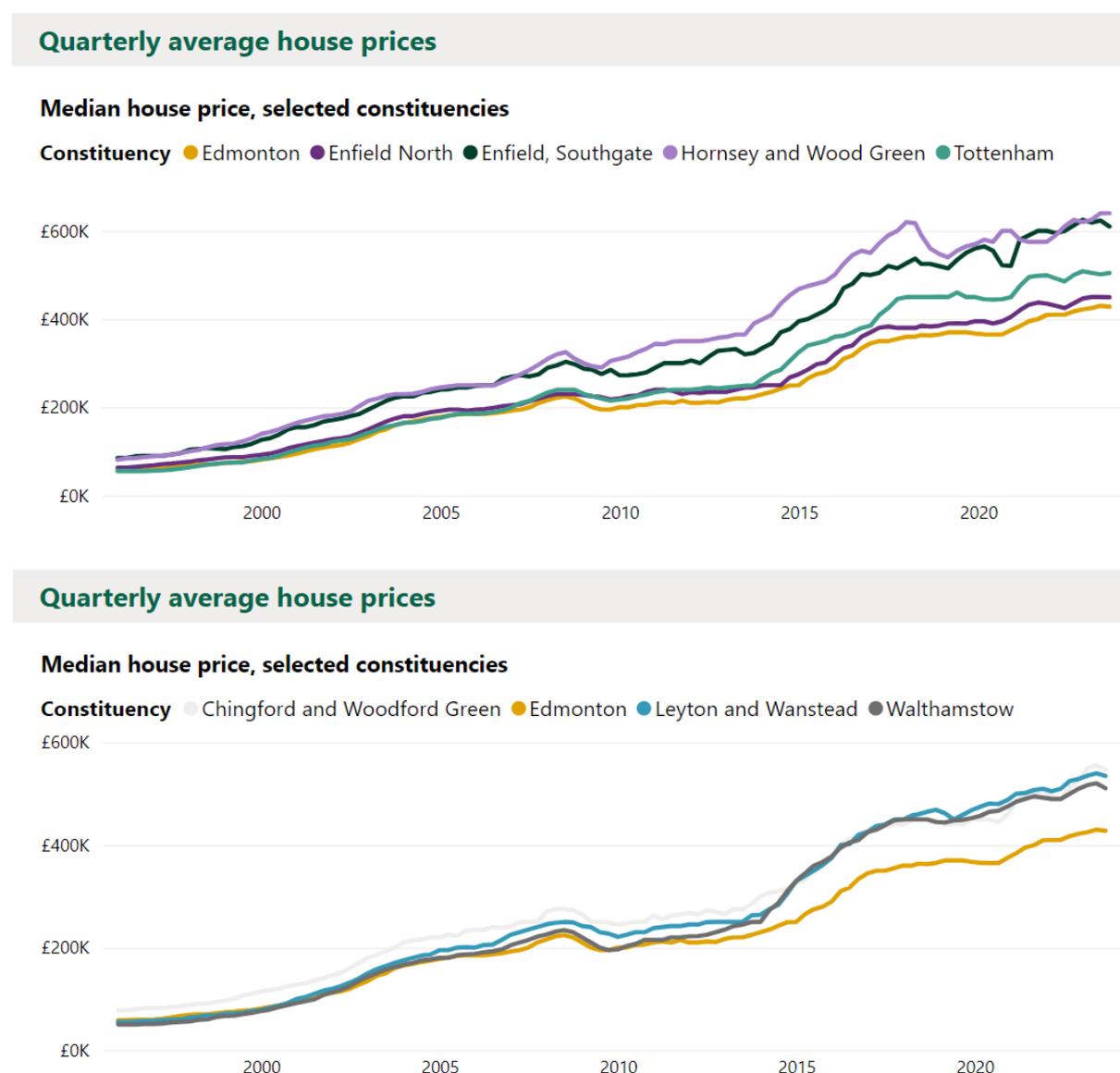
Table 10: Housing Affordability Upper Lee Valley, London Boroughs Compared

	Median House Price (Sept 2023)	Annual Change	5 year Change	Afford.	MSOA, Highest and Lowest (Sept 2023)
Haringey	£585,000			16.6	
Hornsey & Wood Green	£640,000	2.4%	14.3%	15.2	Muswell Hill North (£1,270,000) Scotch Estate (£435,000)
Tottenham	£504,700	0.9%	12.2%	14.3	South Tottenham (£750k) Tottenham Green East (£362,500)
Enfield	£475,000			13.2	
Edmonton	£427,995	2.5%	17.9%	12.2	Bury Street West & Village Road (£635,000) Brimsdown & Ponders End (£283,500)
Enfield North	£449,498	3.1%	17.4%	11.7	World's End (£772,500) Brimsdown & Ponders End (£283,500)
Enfield, Southgate	£610,000	-0.3%	16.2%	16.1	Cockfosters & Hadley Wood (£937,500) Enfield Town South & Bush Hill Park (£410,000)
Waltham Forest	£517,000			14.9	
Walthamstow	£511,000	2.2%	13.6%	13.4	Markhouse & St James Park (£605,000) Blackhorse Road (£460k)
Chingford and Woodford Green	£547,500	6.9%	21.7%	13.3	Highams Park East (£595,000) Friday Hill (£471,000)
Leyton and Wanstead	£535,000	1.9%	15.1%	13.5	Leyton East (£612,000) Leyton South (£430,000)

Source: the local authority data is from ONS (2024b) and the constituency data from House of Commons Library https://commonslibrary.parliament.uk/constituency-data-house-prices/ published 23/4/24.

House price affordability ratios are calculated by the ONS (2024b) by dividing the median house price by the workplace based full-time earnings in an area. The ONS state "In the 12 months to September 2023, we estimate that, in England, the average (median) home sold for £290,000, while the average (median) workplace-based full-time earnings were £35,100, giving a ratio of 8.3. This means that, in England, full-time employees could expect to spend 8.3 times their earnings on purchasing a home in the local authority (LA) area they work in." The affordability figure for London is 11.9 and this compares to 16.6 in Haringey, 13.2 in Enfield and 14.9 in Waltham Forest. Table 10 notes median house prices for the boroughs and the constituencies.

A major priority for the Tri-Borough Partnership is to increase the number of affordable homes for the population and ultimately, reduce the affordability ratio.

We compare physical capital indicators in the experimental data tool (see Appendix A3 for the tables and Silva Ruiz et al, 2026, for the method) for Haringey, Enfield and Waltham Forest and a selection of neighbouring London boroughs. The data tool is calculated for 361 UK local authority districts using variables from the ONS (2025). We compare several indicators to represent physical capital including 2024 median house prices, 2023 electricity consumption, 2024 gigabit capable broadband coverage, 2023 resident population density and 2023 access to amenities indicator with the number of supermarkets per 10,000 of population.

Our results for the experimental physical capital indicators and borough rankings are in Table A9 in the appendix. We find that all these London boroughs are in the top 20% of the physical index compared to other UK local authorities so based on this measure have better than average physical capital. The London boroughs shown have higher house prices, broadband availability and population density than the UK median. Of the Upper Lee Valley boroughs, Haringey ranks highest in the indicator 16/361 (in the top 10%) with house prices above the London median. Waltham Forest ranks 25/361 (in the top 10%) and has broadband coverage above the London median. Enfield ranks 51/361 (in the top 20%) with electricity consumption above the London median.

Intangible Capital

Intangible capital includes research and development; mineral exploration and evaluation; computer software and databases and entertainment, literary or artistic originals. The intangible capital indicators for the experimental data tool are shown in Table A10 in the appendix. The variables include two variables from the Data City[29] to represent the concentrations of innovative and digital firms in the local authority areas. The Data City train its machine learning technology using the website text of companies which spend heavily on research and development, producing a language model that identifies the shared language patterns across all companies that the Data City has collected information on[30]. For example, with the innovation score, this language model includes keywords like "research," "cutting-edge," and "design thinking" but also other less common keywords, such as "apprenticeship" or "training." The model is then used to score all the Data City companies' website text, identifying those that use the same language. A location quotient is calculated comparing the share of companies with innovation attributes to the full sample of companies, then compared to the UK level.

The digitalisation location quotient also follows a location quotient approach, where the Data City calculate the concentration of firms working on digital activities in each local authority compared to the UK's average. They obtain the total number of companies working in digital activities using the Real-Time Industrial Classification (RTIC), which is The Data City's machine learning-based company classification methodology. RTICs are output datasets that group all

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[29] These variables are discussed in more detail in the TPI Productivity Lab blog: https://www.productivity.ac.uk/the-productivity-lab/the-digitalisation-and-prevalence-of-innovative-practices-in-firms-in-mayoral-combined-authorities/

[30] https://thedatacity.com/blog/introducing-our-company-innovation-measure/

companies that describe their activity similarly. The model is trained with a set of company websites representative of the digital sectors. Similar to the Innovation Score calculation process, the algorithm creates a language model that defines the shared linguistics by the company websites and uses it to score the rest of the company websites against it. So, for example, all companies developing Artificial Intelligence technologies can be grouped in a dataset. The Data City has several RTICs representing digital sectors[31].

The remaining two indicators in the intangible capital index are from Beauhurst's (2024) Local Growth Index. These include the number of registered patents to firms in an area and the number of firms receiving InnovateUK grants (for data up to 2023). Both of these indicators are then divided by the number of registered companies in the local authority.

The results from Table A10 show that the London borough with the highest intangible capital ranking is Tower Hamlets in the top 10% of the intangible capital index, ranking 12/361. Haringey ranks highest (265/361 in the bottom 30% of the index) of the three Upper Lee Valley boroughs listed, with a higher digitisation location quotient (LQ) than the London median and a higher innovation LQ than the UK median, so there is promise for future developments the UK Innovation Corridor. The patents and InnovateUK grants (by 1000 firms) are all below the London median. Enfield (351/361) and Waltham Forest (336/361) are in the bottom 10% of the intangible capital index.

Social and Institutional Capital

Social capital refers to the extent and nature of peoples' connections with others and the collective attitudes and behaviours between people that support a well-functioning, close-knit society. It can be classified into four categories: personal relationships, social network support, civic engagement, and trust and co-operative norms.

Putnam (2000) describes "bonding" and "bridging" social capital. Bonding social capital is the connections within social groups or communities and is generally a result of similarity in demographic characteristics, attitudes and available information and resources. Bridging social capital is between social groups. Putnam (2020) suggests that bonding social capital is good for "getting by" and bridging is crucial for "getting ahead". Putnam described bonding social capital as inward looking, reinforcing exclusive identities and promoting homogeneity; whereas bridging social capital as outward looking, promoting links between diverse individuals.

Rodríguez-Pose (2020) links the role of institutions to the fortunes of territories, arguing that institutions directly influence local economic growth as they affect the capacity of economic actors interacting within places to attract investment and high-growth industries. Some thinking already connects elements of institutional capital, such as the benefits of strong networks for knowledge transfer and interactive innovation, and suggests that this is best

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[31] The RTICs selected are: Artificial Intelligence, Cyber, Cryptocurrencies Economy, Data Intermediaries, Design and Modelling Technologies, Digital Creative Industries, E-commerce, Fintech, Gaming, Immersive Technologies, Internet of Things, SaaS, Software Development, Streaming Economy.

realised at the regional level as part of regional policy (Morgan, 1997). Measuring institutional capital may therefore require gaining an understanding of a locality's networks and ecosystems because collaborations, both formal and informal, will support the social development and economic growth of a region.

Local institutions working together is crucial to increase their economic impact and sustainability in their areas such as through more locally focused recruitment and procurement strategies (see Martin, et al, 2022).

The social capital experimental data tool indicators are presented in Table A11. These include the 2023 share of children living in relative poverty[32], the population change between the 2011 and 2021 Censuses, an indicator of culture with museums per 100,000 population in 2021 and then results from the ONS local authority well-being survey for anxiety (inverse of 10-anxiety is used), happiness and life satisfaction. For these indicators Enfield scores in the top 30% of the social capital index (106/361), helped by a lower share of children in relative poverty and low levels of anxiety than the UK median. Waltham Forest (324/361) and Haringey (316/361) are in the bottom 20%. Waltham Forest has nearly a fifth of children living in relative poverty and lower happiness and life satisfaction responses than the UK median.

Financial Capital

The accessibility of finance plays a critical role in determining the level of economic dynamism and resilience of the place. It is essential for allowing firms to commercialise new operations, enter new markets, and achieve rapid growth. As such, finance is important for new firms to establish themselves, and for older firms to scale-up their operation. These firms can be part of a new or emerging economic sector, and the access to finance is vital for the place to be able to establish and grow new economic sectors.

The experimental data tool for financial capital in Table A12 with variables including: prosperity in 2022 (GDP per capita), 2022 Gross Disposable Household Income per head (GDHIph) and the 2023 gross median weekly pay of workers in the borough (this differs from resident wages shown in the scorecard tables). The share of new businesses created in 2023[33] and the 2023 rate of high growth businesses[34] per 10,000 population. In Table A12, we see that Haringey (30/361) and Waltham Forest (19/361) are in the top 10% of the financial capital index with higher incomes, worker wages and new business rate than the UK median. Enfield (116/361) is in the top 40% for financial capital.

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[32] This is the percentage of children under 16 who are living in a relative low-income household. In these statistics, a family must have claimed Child Benefit and at least one other household benefit (Universal Credit, tax credits or Housing Benefit) to be considered as low income

[33] This is the share of newly registered businesses out of the total active business population.

[34] High growth businesses have an average growth in employment of greater than 20% per year over a three-year period. This variable shows the share of high growth businesses as a percentage of active businesses with 10 or more employees.

Human Capital

Human capital describes how well-equipped people are to using other assets to produce beneficial outcomes. It reflects people's behaviours, knowledge, skills, experience, and attributes that allow people to be productive. These features are not easy to isolate or measure. Human capital is important to consider from a policy perspective because many of the investments in education and health by the state will see higher returns for individuals, firms and the economy through higher skills and productivity. It is also important to consider how firms are investing in skills through job-specific training. The key metrics that are used to evaluate human capital are education, skills, training and labour market outcomes (which includes employment wages, and health of the population). Human capital provides a key feedback loop and returns are greater in low-tech sectors (see Roper chapter in the Coyle et al, 2023). Oulton (2000) found that low levels of human and physical capital in manufacturing account for around 60% of the productivity gap between UK businesses and US-owned businesses located in the UK.

Enfield Population and Inequalities

Enfield, with 330,000 residents, has grown by 5.6% (between 2011 and 2021)[35] and remains highly diverse, with nearly half of its population from minority ethnic backgrounds.

Figure 6: Enfield Index of Multiple Deprivation 2025
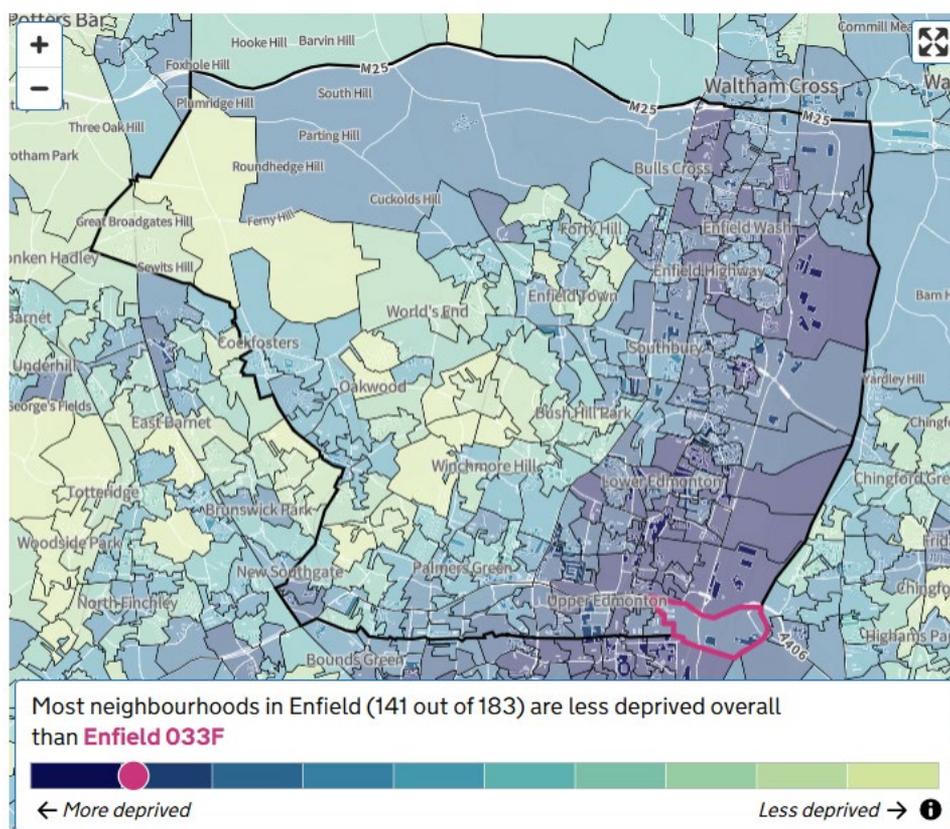
Source: Index of Multiple Deprivation, overall measure from the Ministry of Housing, Communities and Local Government (MHCLG, 2025). The neighbourhood Enfield 033F is the location of the Construction Skills Academy with postcode N17 0RY. See MHCLG.

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[35] See information for Enfield: https://www.ons.gov.uk/visualisations/censusareachanges/E09000010/

Figure 6 shows the Index of Multiple Deprivation (MHCLG, 2025) for Enfield with the location of the Construction Skills Academy neighbourhood highlighted. Enfield is ranked as the 47th out of 296 English local authorities for the proportion of neighbourhoods in the 10% most deprived (18% or 33 of its neighbourhoods are in the top 10% most deprived). The concentration of deprivation in Enfield is in the eastern wards such as Edmonton Green and Upper Edmonton, while western areas like Cockfosters remain affluent. Enfield has significant health inequalities—life expectancy gaps of up to eight years between richest and poorest areas—and healthy life expectancy below the state pension age. Rising housing demand, an aging population, and high rates of chronic conditions compound pressures on housing, healthcare, and social services, making targeted interventions essential.

Haringey Population and Inequalities

Haringey's population of 264,300 is highly diverse, but the borough faces stark inequalities. In the Index of Multiple Deprivation (MHCLG, 2025) Haringey ranks 42nd of 296 English local authorities for the proportion of neighbourhoods in the 10% most deprived (19% or 28 of its neighbourhoods are in the top 10% most deprived).

Figure 7: Haringey Index of Multiple Deprivation 2025
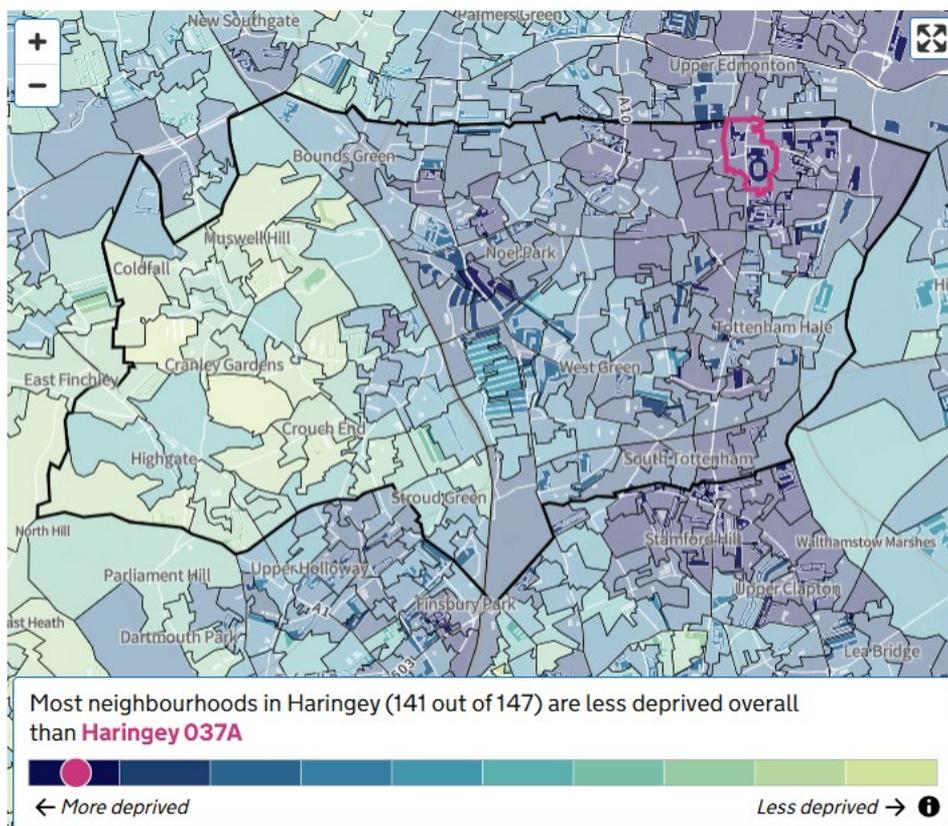
Most neighbourhoods in Haringey (141 out of 147) are less deprived overall than **Haringey 037A**

← More deprived   Less deprived → ⓘ

Source: Index of Multiple Deprivation, overall measure from the Ministry of Housing, Communities and Local Government (MHCLG, 2025). The neighbourhood Haringey 037A is the location of the Tottenham Hotspur Stadium with postcode N17 0BX. See MHCLG.

The IMD map for Haringey is in Figure 7 where we can see that deprivation is concentrated in Tottenham and Northumberland Park, contrasting sharply with affluent areas like Highgate and Muswell Hill. Life expectancy has declined slightly post-Covid, and healthy life expectancy remains low, leaving residents to spend nearly two decades in poor health. The gap in healthy years between richest and poorest deciles is severe—15 years for men and 17 years for women—highlighting the need for targeted health and social interventions alongside strategies to address entrenched poverty and housing barriers. A study by Place Matters (Residents of Northumberland Park, 2025) has documented the lived experience of poverty in Northumberland Park.

Waltham Forest Population and Inequalities

Waltham Forest, home to 278,400 residents, has grown by 7.8% (between 2011 and 2021). In the Index of Multiple Deprivation (MHCLG, 2025) Waltham Forest ranks 187th of 296 English local authorities for the proportion of neighbourhoods in the 10% most deprived (0.7% or 1 neighbourhood is in the top 10% most deprived).

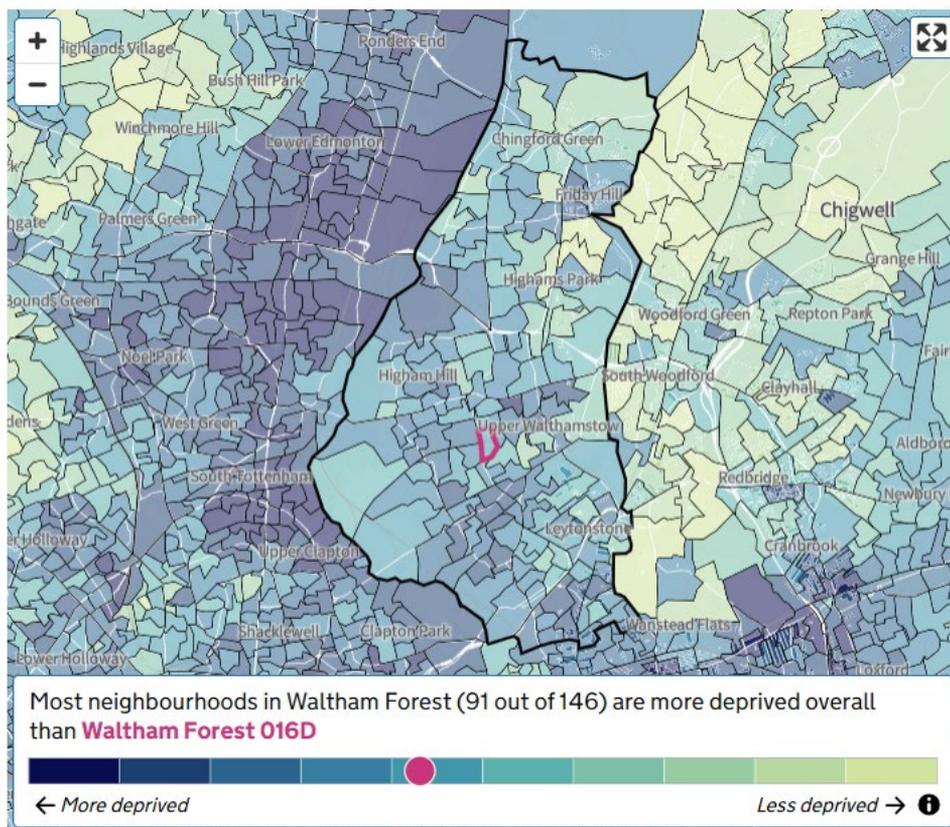**Figure 8: Waltham Forest Index of Multiple Deprivation**

Source: Index of Multiple Deprivation, overall measure from the Ministry of Housing, Communities and Local Government (MHCLG, 2025). The neighbourhood Waltham Forest 016D is where the University of Portsmouth Campus is located with postcode E17 9PP. See MHCLG.

The IMD map for Waltham Forest is in Figure 8, we see that deprivation persists around Higham Hill and Walthamstow. While the borough has seen improvements in employment and health outcomes, life expectancy remains below London averages, particularly for men (78.4 years), though healthy life expectancy has improved since 2015. Persistent challenges include housing affordability, income inequality, and crime, which continue to shape social and economic conditions. The borough's aging population and rising housing costs add further pressure, requiring integrated strategies for inclusive growth.

Labour Market Statistics

This section explores the existing structure of the labour market by examining occupational composition in each of the boroughs. We then look at the highest qualification obtained by the resident population which enables a comparison to be drawn between the skill requirement of jobs in an area compared to the actual skill level available. Finally, we look at areas of job growth in terms of vacancies by occupation. Taken together, these three elements explain the dynamics of the current job and industry structure, where there are potential areas for better utilisation of skills in an area (supply), and lastly, what the demand in terms of the occupation level from employers is, providing insights into emerging trends and opportunities. Statistics are extracted from the UK Census 2021[36].

In terms of occupational structure and composition, Enfield has around the national average (20%) for professional occupations, covering occupations that require professional licences or accreditation, mostly of degree-level, such as doctors, lawyers, accountants, see Figure 9. However, there is evidence from the Labour Force Survey (LFS) that this figure has declined somewhat since the pandemic, see Table 11, possibly due to young professionals leaving. The size of the other occupations also aligns with the national average, although the concentration of care workers is slightly higher in Enfield at 10%, although this may have declined according to the LFS since the pandemic. The LFS also shows that there has been an increase in elementary occupations, such as domestic cleaning, but a growth in associate professional occupations, for example, opticians and pharmaceutical workers.

In terms of change post-pandemic, we see a growth in some middle-tier occupations, for instance, jobs in admin and skilled trades. However, overall, there is a growth in lower wage occupations, such as process, plant and machine operatives and elementary occupations, which are negatively correlated with productivity growth. While these shifts do not indicate polarisation, the change in occupation profile of the borough is also a result of the changing composition of jobs and industries in an area and can reflect the lack of demand for higher wage and higher productivity-related jobs and industries.

The occupational composition of Haringey is also largely similar to the national average picture, see Figure 10, albeit with a higher concentration of professional workers, probably due to the proximity to the City and central London. Moreover, there is evidence from the

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[36] An important point to note regards the quality of labour force statistics since the pandemic. In terms of the breakdown of those employed by occupation, there are large discrepancies between the Labour Force/ Annual Population Survey and the UK Census 2021. For example, in Enfield, results from the LFS state that the proportion of the employed workforce in professional occupations is approximately 30.3%, whereas the Census data from the same calendar year, 2021, estimates the proportion to be 20.5%. Therefore, this section will focus on evidence from the UK Census on the structure and skills of the workforce.

LFS/APS (Table 12) that this proportion has been on the increase year-on-year since the pandemic. Also like Enfield, there has been a growth in process, plant and machine operatives, as well as elementary occupations since the pandemic, which shows a growth in low wage jobs in the area. This, in combination with the decline of middle-tier occupations, shows a degree of job polarisation, in which the distance between high-quality, high-paid jobs, and lower-wage jobs has increased. These lower-wage jobs are typically characterised by high precarity and poor working conditions.

Figure 9: Enfield Working Population by Occupation from Census 2021
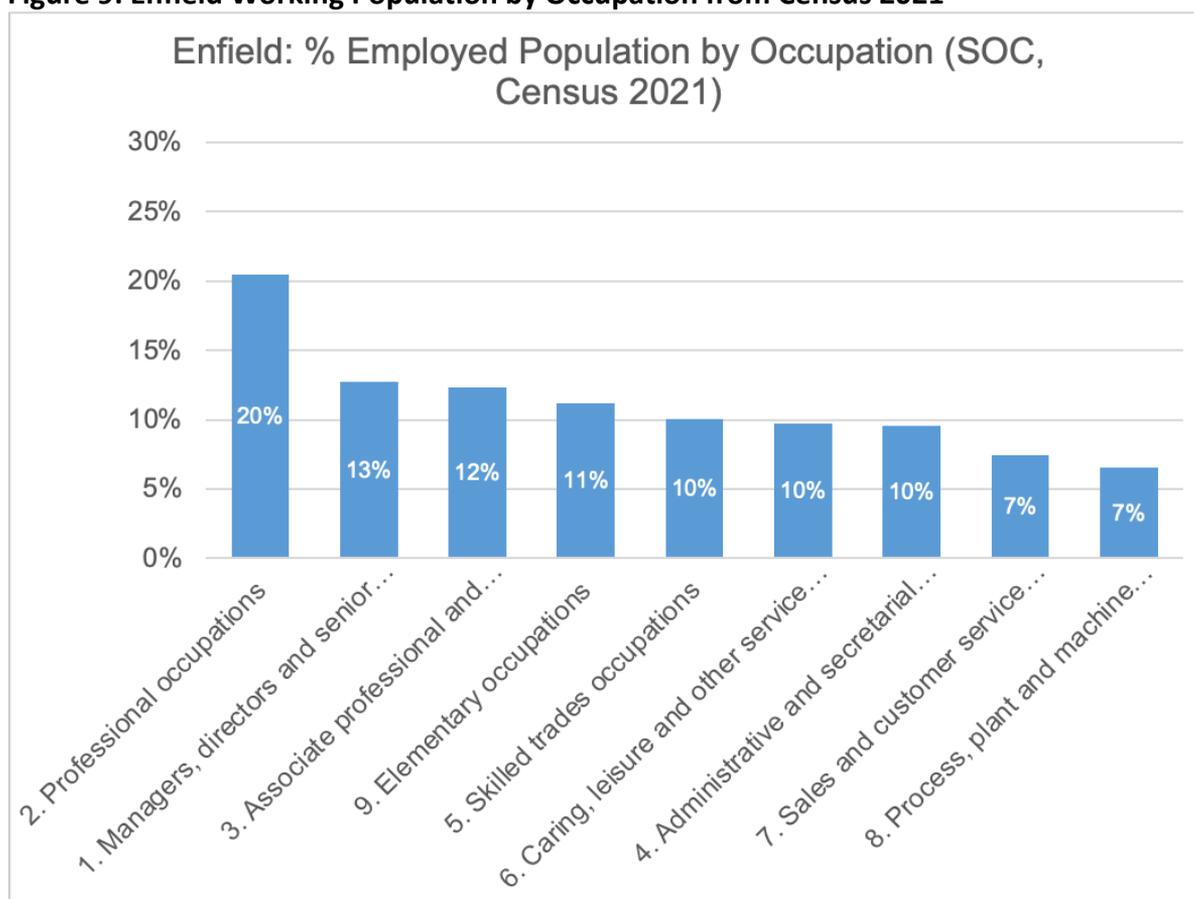
Table 11: Enfield Working Population by Occupation (LFS)

Enfield, Occupation Structure (SOC 2020)						
SOC (2020)		**2022**		**2023**		**2024**
1: managers, directors and senior officials (SOC2020)	⬆	15.7	⬆	15.7	⬇	8.3
2: professional occupations (SOC2020)	⬆	30.6	➡	26.1	⬇	23.8
3: associate professional occupations (SOC2020)	⬇	9	⬇	11.2	⬆	16.7
4: administrative and secretarial occupations (SOC2020)	⬇	8.9	➡	9.6	⬆	10
5: skilled trades occupations (SOC2020)	⬇	6.3	⬆	12.4	⬆	10.9
6: caring, leisure and other service occupations (SOC2020)	⬆	12.3	⬇	7	⬇	4.8
7: sales and customer service occupations (SOC2020)	⬆	7.7	➡	5.9	⬇	4.4
8: process, plant and machine operatives (SOC2020)	⬇	3.6	➡	4.3	⬆	5.7
9: elementary occupations (SOC2020)	⬇	5.9	⬇	5.8	⬆	15.4

Source: Labour Force Survey

Figure 10: Haringey Working Population by Occupation from Census 2021

Haringey: % Employed Population by Occupation (SOC, Census 2021)
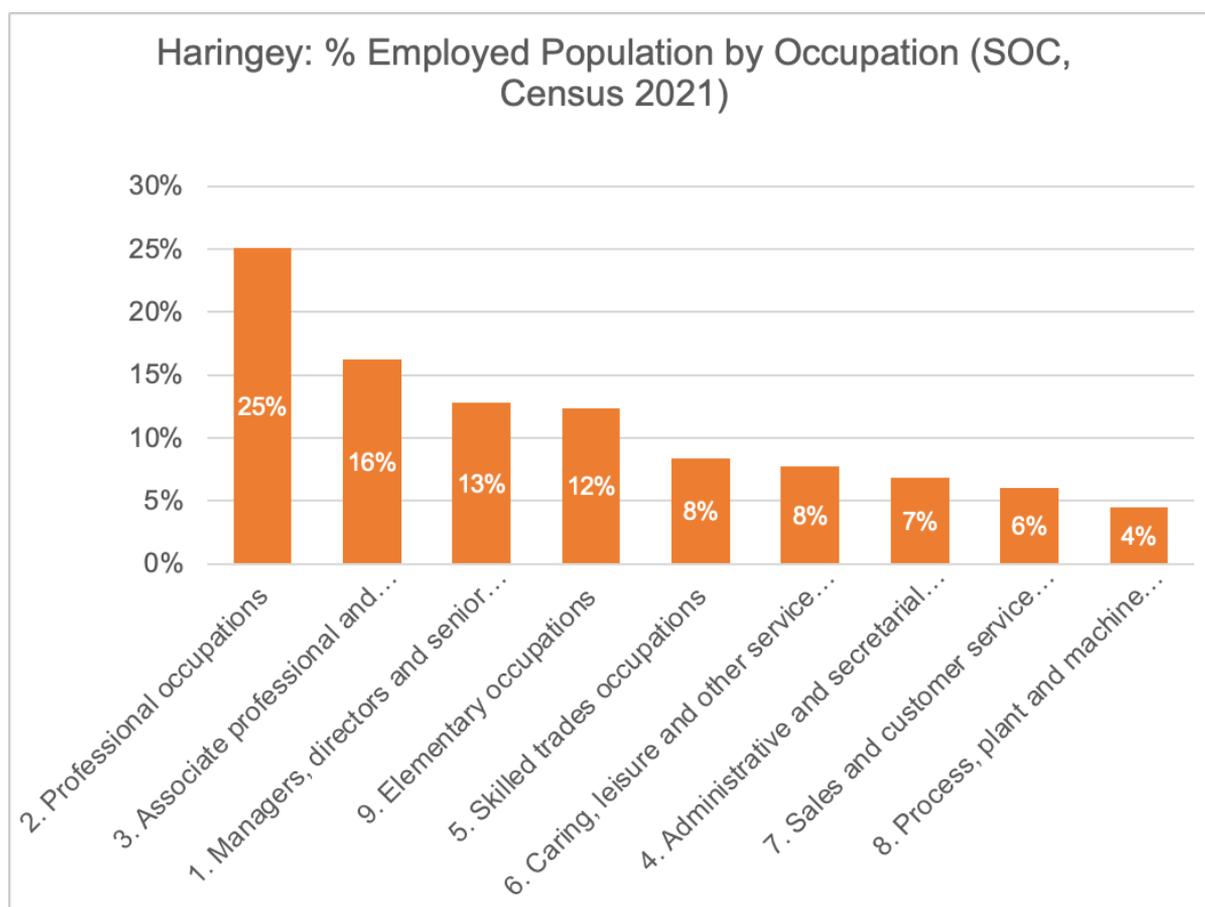
Table 12: Haringey Working Population by Occupation (LFS)

Haringey, Occupation Structure (SOC 2020)						
SOC (2020)		2022		2023		2024
1: managers, directors and senior officials (SOC2020)	⬆	10.9	⬇	9.5	⬇	9.1
2: professional occupations (SOC2020)	⬇	28.6	➡	31.9	⬆	34.5
3: associate professional occupations (SOC2020)	➡	18.3	⬆	20.5	⬇	16
4: administrative and secretarial occupations (SOC2020)	⬆	9.7	⬆	10.8	⬇	3.7
5: skilled trades occupations (SOC2020)	⬆	9.2	⬆	8	⬇	4.1
6: caring, leisure and other service occupations (SOC2020)	⬇	7.3	⬇	7.1	⬆	12.8
7: sales and customer service occupations (SOC2020)	⬆	2.4	⬆	2.4	⬇	1.2
8: process, plant and machine operatives (SOC2020)	⬇	1.8			⬆	4.2
9: elementary occupations (SOC2020)	➡	11.8	⬇	8.3	⬆	14.4

The figures from the Census 2021 for Waltham Forest in Figure 11 again show a similar breakdown to Haringey, in that there is a slightly higher concentration of professionals and associate professionals resident than the national average. The proportion of the employed population working in elementary occupations although it is similar to the other areas, has declined year-on-year since the pandemic, see Table 13. We also do not see a much in terms of job polarisation, as much of the relative growth in occupations, has occurred in middle-tier

occupations such as care work, sales and administrative jobs. Furthermore, the lower-wage occupations have reduced in size to around the national average.

Figure 11: Waltham Forest Working Population by Occupation from Census (2021)
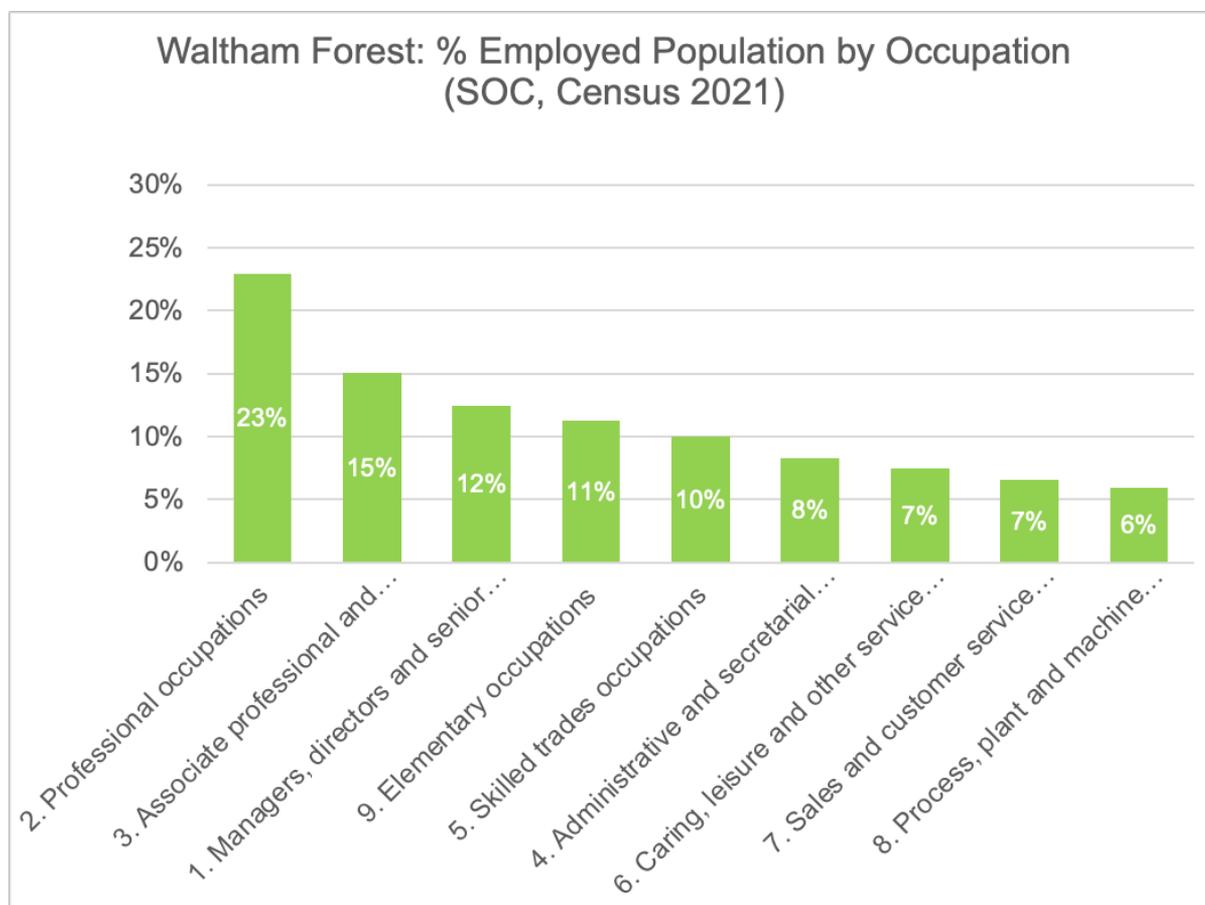
Table 13: Waltham Forest Working Population by Occupation (LFS)

Waltham Forest, Occupation Structure (SOC 2020)						
SOC (2020)		**2022**		**2023**		**2024**
1: managers, directors and senior officials (SOC2020)	⮕	11	⬇	8.1	⬆	13.8
2: professional occupations (SOC2020)	⮕	30.3	⬆	35.4	⬇	27.6
3: associate professional occupations (SOC2020)	⬇	15.5	⬆	19.6	⬇	16.3
4: administrative and secretarial occupations (SOC2020)	⬆	10.2	⬇	7.9	⬆	9.9
5: skilled trades occupations (SOC2020)	⬆	8.3	⬇	6	⮕	7.1
6: caring, leisure and other service occupations (SOC2020)	⬇	6.5	⬇	6.4	⬆	7.6
7: sales and customer service occupations (SOC2020)	⮕	4.8	⬇	3.8	⬆	6.4
8: process, plant and machine operatives (SOC2020)	⬆	3	⮕	2.7	⬇	2.5
9: elementary occupations (SOC2020)	⬆	9.7	⬇	8.8	⬇	8.7

The occupational composition can help elucidate the current structure of jobs and wages in the area, as well as the level of skills and training required by particular jobs. However, often

there is an imbalance between the level of qualification or educational attainment and the current job, which is indicative of a mismatch between the supply of skills in the current population, and the demand for skills within jobs created by employers. We can estimate the level of this mismatch by comparing the current structure of employment in an area and comparing this to the concentration of qualification levels. The estimates in Table 14 are calculated by the ONS from UK Census 2021 data and are official statistics in development. The match indicates the proportion of the population working with the same level of qualifications at the mode for that occupational category (SOC 2010). If this is above or below the modal qualification level for that category, it is classified as more or less qualified. All boroughs have a slightly higher share than the UK with 21% more qualified for the occupations they are employed.

Table 14: Comparison of Investment Assets, average growth rates over time

Local Authority	Matched (%)	More qualified than average (%)	Less qualified than average (%)
Haringey	58.5	21.6	19.9
Waltham Forest	55.9	21.1	23
Enfield	51.4	21.1	27.5
UK Average	51.9	20.2	27.9

There are key labour productivity-related drawbacks to these types of mismatch. For an over-qualification mismatch, this may entail an "inefficient allocation of resources" (the supply and demand goods and services depending on consumer preferences) and also impacts negatively on the ability of more productive firms to attract adequate talent. On the other hand, lower-level mismatch may result in lower firm-level labour productivity through a lack of adequate skill, which may drive an inefficient allocation of resources. In London, skills mismatches could in part be related to the UK 'brain-drain' from other regions of the UK to London and the South East, in which graduates flock to the area but then are not able to find a job which sufficiently matches their qualifications.

To address some of these inefficiencies, researchers have pointed towards several policy interventions related to VET (vocational education and training), housing and mobility. Firstly, in-work training and upskilling can play an important part in addressing these types of incongruencies, by reducing the distance between lower-level mismatches. In turn, this has been shown to assist in retaining talent and boosting engagement by nurturing employee development. There is also a need to rethink the local relationship between the supply and demand for skills in the UK. Policy-interventions should be driven by demand-side information from employers' skills needs in the first instance, such as in local skills improvement plans, and that employer incentives should be created, e.g., tax credits for human capital investments in training and skills. Also, this in turn should inform the design and provision of local courses and training for in-demand skills, for instance in further education colleges but also for those already in work. Finally, a greater alignment of the priorities between local private and public sectors on VET, education, technological and technical skills, could help reduce the impacts of individual skills mismatches, promote greater labour productivity, and have spill-over effects on R & D.

In terms of job polarisation, while empirical studies have not necessarily always found a similar polarising effect on wages (Salvatori, 2018), it is still important to consider the negative and long-term implications of this phenomenon in a local context. In particular, it is associated with poor job quality on the lower end of the occupation structure, and is a greater barrier to social mobility (Xu, 2023). Moreover, in London, an IFS report explains how agglomeration effects of high-skilled graduates, mean that low-skilled work may be outsourced to agencies, a source of reduced productivity (Xu, 2023). While local policy interventions may not have a ready-made silver bullet for many of these wider national trends, it has been shown that enhancing investment in employee training and development, as well as readdressing job design and career paths, can help mitigate or create better working conditions and prospects for those on the lower-end of the occupational structure.

Human capital indicators for the data tool are shown in Table A13. The variables included are the 2023 employment rate, 2023 share of the population with level 3 skills and above, the dependency ratio[37] in 2021, 2018-20 healthy life expectancy (male and female age in years combined) and the 2023 proportion on adults who smoke (the inverse of this measure is used in the tool). Waltham Forest is in the top 10% for human capital along with Islington and Hackney. Waltham Forest has a higher share of level 3 skills in the population, higher healthy life expectancy and lower share of smokers than the UK median. Haringey is in the top 40% but Enfield is in the bottom 30% of UK authorities for human capital. It is important to note that the healthy life expectancy outcomes for the selected London boroughs are below the state pension age (currently at 66) so a substantial proportion of the London population will need to continue to work in poor health.

Natural Capital

Natural capital refers to a place's stock of natural resources and ecosystems that provide a wide range of valuable services and products for humanity. According to the HM Treasury Green Book, it encompasses everything from the quality of the air, the quality of the water, the fertility of the soil, as well as vital ecosystems such as forests, wetlands, oceans and rivers. These assets can provide economic and social value either through their produce (such as from forests), or from the services that they provide (such as recreational space), or from the inherent value that is placed on them by local citizens (such as biodiversity).

There are some significant natural capital resources in the Upper Lee Valley, primarily the River Lea. Historically[38] the River Lea provided transport and powered mills that were vital for local industries. London's rapidly growing population urgently required a greater, more reliable supply of clean water. Walthamstow was chosen as an ideal location for this purpose. Ten reservoirs were created between 1863 and 1904, each one a greater feat of Victorian and Edwardian engineering skill and have provided millions of Londoners with their drinking water ever since. Walthamstow Wetlands is a visitor attraction and after restoration and habitat enhancement work was re-opened to the public in 2017. Wanstead Flats is also an area of open grassland, which is on the border of Waltham Forest and Redbridge, and managed by the City of London Corporation, and is accessible by public transport.

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[37] The dependency ratio is the non-working age population to working age population (16-64 years).
[38] See https://www.wildlondon.org.uk/nature-reserves/walthamstow-wetlands/history

As noted in the London Climate Resilience Review, GLA (2024), Enfield have created a community green space by de-culverting a lost river and allowing it to run through wetland basins at Firs Farm. This area was an underutilised open space, but by incorporating footpaths and seating areas alongside the wetlands, the park is now full of dog walkers, children, families, and is supported by an active group of community volunteers.

GLA (2024) also notes London's pilot Subregional Integrated Water Management Strategy (SIWMS) for the Lower Lea is a leading example of integrated water management[39]. It has been developed in partnership between the GLA, Environment Agency, Thames Water, Natural England, Enfield, Waltham Forest, Hackney, Haringey, Tower Hamlets, Newham and the City of London. The strategy is a non-statutory, dynamic planning level framework that sets out actions and is responsive to changing conditions.

It is vital to provide investment to prepare London's buildings for climate resilience. The GLA (2024, p.83), Climate Resilience Review notes that Haringey stated the importance of: "Addressing inequalities and targeting support for the most vulnerable / less able to adapt and in areas of highest heat risk (Retrofitting areas of higher risk i.e., care homes, schools, nurseries, specific housing stock) – speed up any evidence research that will help to identify building stock most at risk and help to prioritise)."

The relationship between environmental sustainability and productivity growth is not straightforward. On the one hand, productivity growth appears to entail an increase in resource consumption, development of green space, and prioritising the accumulation of more equipment over 'green' technology that is often more expensive. On the other hand, climate change poses significant challenges to productivity, as rising temperatures and extreme weather events disrupt economic activities, damage infrastructure, and reduce labour productivity (Dietz and Stern, 2015; Howard and Sterner, 2017; Pörtner, et al, 2023). Moreover, the depletion of natural assets can severely impact wellbeing by removing the services that individuals get when they are close to nature.

Alternatively, research suggests that it is possible to "decouple" productivity growth from environmental degradation (Pilat, 2024). This involves implementing policies that encourage firms to increase the value derived from existing resources whilst also reducing CO_2 emissions (Pilat, 2023). Chiefly, this requires encouraging the usage of equipment and products that place a lower burden on the environment – examples include renewable energy, goods that are fully recyclable, and energy-saving insulation. However, in order to transition to an economic structure that is sustainable overall, these economic products and activities need to be able to outcompete the less sustainable alternatives. A local example of retrofitting across the boroughs, includes a pilot scheme introduced by Enfield and Waltham Forest in 2022. This programme, which was undertaken through an Innovation Partnership, includes insulation, replacing single-glazed windows, solar panel installation and gas removal.

Examples such as this initiative, demonstrate how innovation policies can enable this transition by working to remove the barriers to development, adoption, and diffusion of these technologies. Such policies include direct funding for R&D, promoting the human capital investments that are required to engage in innovation, and building connections between firms and research organisations. The importance of these connections cannot be understated – as Jones (2022) puts it, "information may move at the speed of light, but know-

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[39] london.gov.uk/sites/default/files/2023-07/Sub-regional integrated water management strategy East London – July2023.pdf

how moves with people". Indeed, a lack of connectivity with the wider national and international innovation system can be a key barrier to the adoption of more sustainable technologies.

Aside from innovation, many policy areas have serious implications for the sustainability agenda. Key to ensuring that policymakers can prioritise and design policies in a way that is consistent with addressing climate change lies in the integration of natural capital accounts within economic policymaking. Natural capital accounts cover the assets and services provided by nature within a place. Natural capital can cover the value provided by nature regarding the goods that it provides, the recreational activities it enables, and the wellbeing it causes through ambient presence. The ONS (2023c) estimates that the health benefits from recreation in nature is valued at £445bn in 2021, while the total asset value of ecosystem services was £1.5 trillion (in the UK). In part, these estimates were formed using shadow prices -estimated prices where no market price exists - and environmentally adjusted measures which aim to capture the true cost and value of natural resources. This approach not only supports more sustainable management of the resources in a place but also ensures that productivity gains are aligned with environmental goals.

Table 15: Upper Lee Valley, London Boroughs Natural capital Compared

Indicator	Haringey	Enfield	Waltham Forest	London
Average distance to nearest Park or Public Garden (m)	318.68	440.04	429.15	386.67
Average size of nearest Park or Public Garden (m2)	89,880.06	166,492.84	120,027.06	212,926.71
Average number of Parks or Public Gardens within 1,000 m radius	6.32	3.48	4.12	5.07
Average combined size of Parks or Public Gardens within 1,000 m radius (m2)	488,388.23	405,393.58	306,116.28	675,007.06

Source: ONS (2020), Ordnance Survey.

Table 15 presents information on the access to park and public gardens from the ONS (2020). 27.7% of Haringey is made up of open space compared to the borough average for London of 33%. There is marked difference in the amount of open space in different wards. All homes in Alexandra and Bounds Green in Haringey have good access to nature, while only two-fifths of homes in West Green (38%) and Noel Park (41%).

The indicators we present in Table A14 presents the experimental data tool of natural capital. The indicators are from the Department from Energy Security and Net Zero (DESNZ, 2024). Table A14 shows the territorial greenhouse gas emission estimates for the total of each category. The greenhouse gas emissions are measured in kilo tonnes of carbon dioxide equivalent (kt CO2e). The category for Land Use, Land-Use Change and Forestry (LULUCF) covers the net emissions from land classes including: forest land; cropland; grassland;

wetlands; settlements, other land and the pool of harvested wood products. The DESNZ (2024) report presents the emissions per capita and per square kilometre. To create the index each of the above categories are divided by land area in square kilometres before standardising.

The highest performing London borough in Table A14 for greenhouse gas emissions scaled by square kilometres is Redbridge at 274/361. Waltham Forest ranks 303/361, within the totals above the Land Use, Land-Use Change and Forestry (LULUCF) category is negative as it is taking in the effect of the forest within the borough reducing emissions. Enfield has high emissions from transport with the highest share coming from A-roads, then motorways as the M25 runs along the top of the borough. Enfield also has a high share of waste emissions with the largest share of emissions from landfill. The Energetik heat network is aiming to reduce emissions.

5. Qualitative Analysis

We used a mixed methods approach to deepen our understanding on how some of the most abstract and difficult to quantify elements of the capital's framework were being thought about in practice. We envisaged that the qualitative analysis would help to inform our understanding of how the capitals of social, institutional and intangible were thought about in practice. However, we did not exclude the other capitals of physical, financial, human and natural and all seven capitals have been included in this analysis. In addition to gaining insights into how the capitals are understood across a range of stakeholders, we are also interested in the interdependencies across the capitals.

We used three qualitative methods to broaden our understanding of how key stakeholders in the Upper Lee Valley are thinking about the capitals. These included a baseline survey that asked for both descriptive responses as well as ranked responses. A stakeholder workshop, where key actors from across the boroughs shared their views on the capitals in relation to their experience or working in the area and semi-structured interviews, where participants were asked questions with a particular emphasis on institutional and social capital.

Participants were selected in relation to two broad criteria. Firstly, their experience was aligned to one of the capitals, recognising some cross over into other capitals. Secondly, by the organisation that they worked for and its strategic importance to the Upper Lee Valley. We gained insights from a broad and diverse range of key stakeholders working in the boroughs and across different organisations, sectors and levels of seniority. This included participants from Higher Education; Local Government; the Business Community; the Community and Voluntary Sector; Transport; Civic Society; Finance; and Environment sectors.

Stakeholder's Workshop and Survey Results

In June 2024, the IPPC project team held a meeting at the University of Portsmouth London Campus in Walthamstow with various public and private stakeholders to discuss each of the seven capitals in a group setting. A brief Qualtrics survey on productivity and the capitals was

completed by participants at the start of the meeting. The IPPC team then gave brief definitions of each capital area prior to a ten-minute discussion per capital, followed by a general discussion.[40]

Figure 12: Capitals Word-cloud from the Stakeholder's Workshop
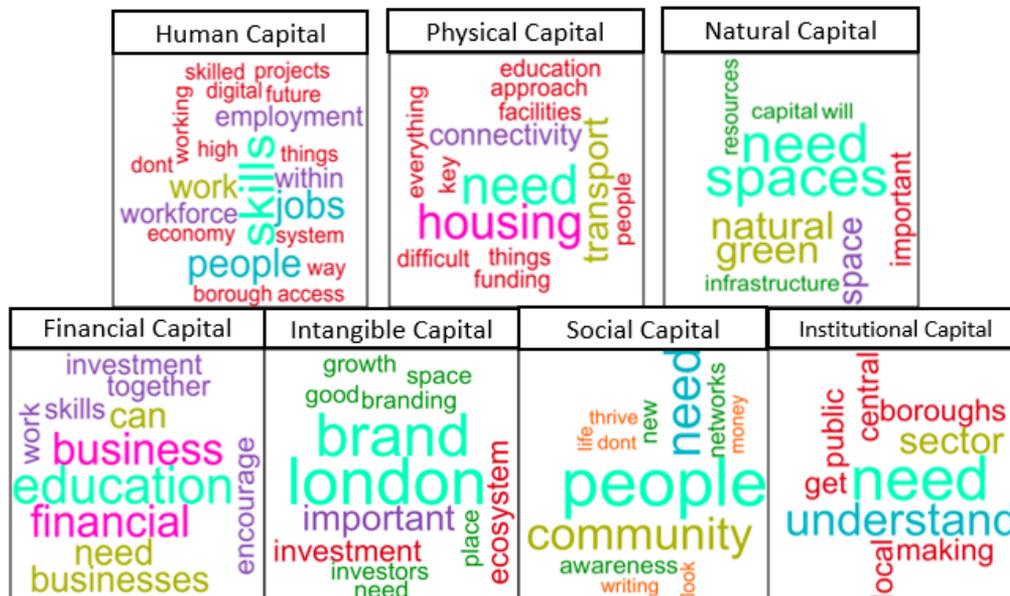
A 'wordcloud' package was then used to visualise the most frequent keywords from the various discussions.[41] The strength of this textual analysis is to understand how dominant themes emerge in the form of keywords across different discussions within the seven capitals. Figure 12 shows visual panels of each capital with the keywords from each 10-minute discussion.

What is clear from the discussions in Figure 12, is the centring of notions of community, needs and people. While this is not unique to this locale, these terms indicate a sense of urgency to meet the demands of the local population. Community needs in this sense, are viewed as basic pre-determinants to unlocking the potential for productivity ambitions to be realised. Crucially, the discussion of needs cuts through the different drivers of productivity, covering social conceptions of community needs, the demand for physical assets both related to individual and firm-level functions, and recreational and public spaces.

Another key link is between human and physical capital, in particular the connectivity between employment, education and facilities. This suggests a potential barrier to realising

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[40] All participants gave informed consent, no personal information was collected and any potentially disclosive data has been anonymised. The meetings were recorded by the IPPC project team and notes transcribed from plain text files into data frames in R.

[41] For a detailed discussion, see https://cran.r-project.org/web/packages/wordcloud/wordcloud.pdf. A range of 'stopwords' was employed to avoid muddling the important themes with common language and functional words, such as 'and', 'but', 'the' etc.

productivity and strategy, in terms of difficulties in connecting parts of the resident population with education and employment opportunities. This may influence self-selection behaviour into more readily available albeit less favourable forms of employment, as suggested by 'borough access', also hinting at access to 'the centre', so residents who commute to work in the City of London.

Regarding the discussion on intangible capital, there is quite a focused discussion on branding and the need to market the area appropriately. The link with investment here is quite apparent, and the link with branding framed in terms of cultivating an 'ecosystem'. Interestingly, financial capital is discussed in relation to not only business access to finance, but also in terms of the role of the education system in providing knowledge and skills to properly realise investment ambitions. Finally, the institutional capital discussion reflects the multilevel nature of local borough versus central London governance in which policy-making occurs.

This analysis is key to appreciating the way in which stakeholders, who implement a range of policies and services on the ground in local areas, understand concepts and methods that are used to design national policies in the wider framework of local growth. Moreover, when compared with themes in Figure 13, in which the survey asked the participants about their roles, planning, productivity and themes discussed, we see some contrast.

Figure 13: Capitals Word-cloud from the Stakeholder's Workshop & Survey

Figures 13, left panel shows the stakeholder workshop taken in full, compared to the right panel which is an assimilation of text responses to baseline survey questions on productivity, answered prior to the workshop. As discussed above, the culmination of the roundtable

discussion centres particularly on the capitals as a mechanism to address the needs of people, community, and particularly the role of work and skills in delivering these ambitions.

The contrast of the discussions is quite striking, the baseline survey is ostensibly much more focused on definitions of productivity from a policy-practitioner perspective, including aspects of productivity, such as labour, jobs, employment, calculations and measurement (data, KPIs, targets, rate, output and GVA). The themes also go beyond this to discuss broader drivers of productivity from this practical standpoint, focusing on business, resources, education, learning, which in turn is an acknowledgement of the wider participatory role of civil society, firms and the education system in informing policy design. The descriptions about their approaches are emphasised with terms such as flexible, sustained, specific, confident, explaining the temporal dimensions and need for long-term public support and legitimacy for policy planning decisions.

Interviews

This section of the report includes insights gained from the interviews They are based on the analysis of seven semi-structured interviews.

Interview Objectives:

A. To gain insight into how the participants make decisions, who they consult, what they prioritise, where they seek assistance, and what they may require assistance or advice on.
B. Explore participants' experiences and perspectives related to both productivity and investment planning.
C. Identify common themes and patterns in participants' responses.

Broad Research Questions:

1. What are the key factors influencing strategy and investment planning from the perspective of participants?
2. How do participants think about productivity in their working lives?
3. Are there common challenges or opportunities related to productivity and investment reported by participants?

Questions were designed with an emphasis on social and institutional capital. Interviews were carried out online and lasted for one hour. Data was captured by notes and audio recordings and each interview has a typed verbatim transcript. From this, there were two analytical approaches taken. Firstly, accounts that related to a specific capital/s were grouped, to see patterns in the types of things that were being discussed in relation to the capitals. This was then analysed in relation to links across the capitals. Secondly, themes were generated that described common challenges, concerns and strengths that were evident in the accounts that participants shared. These have been condensed into challenges and enablers that provide insights across the capitals with a particular focus on **social and institutional** capital.

Interview Findings

The interviews demonstrate the boroughs' comprehensive approach to driving investment, fostering inclusive growth, and addressing productivity challenges through strategic partnerships, data-driven decision-making, and adaptable governance structures. There are strong examples of genuine collaboration across anchor institutions and bold, ambitious and effective leadership, empowering and enabling partners across the combined area. Examples of anchor institutions in the three boroughs include long-standing businesses, libraries, established 'third-spaces', cultural and artistic centres, markets, health centres, education and learning centres and sports facilities. The borough's priorities are informed by the needs of residents and businesses, with a focus on inclusive growth and an inclusive economy.

The data-driven approach highlighted in the interviews covers several key aspects. Local councils utilise various data sources, including business databases, funding portals, and on-the-ground intelligence, to inform their understanding of the local business landscape and monitor progress. They aim to develop a compelling narrative and investment proposition to attract further investment, focusing on sectors and trends identified through their Productive Valley Fund and other engagement activities.

The councils work closely with internal teams and external partners to inform their plans and deliver support. Funding uncertainty, particularly around the transition from EU to UK funding sources, is a key challenge. The representatives utilize various data sources to understand the local business landscape and monitor progress but acknowledge the need for more comprehensive and up-to-date data on high-growth and high-productivity businesses.

The authorities are prioritizing inclusive growth and an inclusive economy, addressing challenges such as budget constraints, maintaining a credible investment presence, and ensuring sufficient land supply. They utilise data, stakeholder engagement, and governance structures to inform their operational planning, track progress, and promote private sector engagement and funding opportunities.

Examples were shared of creative approaches, demonstrating strong public and private sector partnerships. These include Enfield Council's Energetik district heat network project which uses waste heat to provide carbon-neutral and low-cost heating to homes, overcoming challenges around high installation costs through government grants and stakeholder collaboration. Prologis, a real estate investment trust, is working with the Waltham Forest local authority to redevelop a retail park into a multi-level logistics facility, creating around 1,200 jobs across various sectors. While facing challenges around transport and traffic impacts, Prologis is collaborating with local authorities to find solutions and expand its national training program to generate social value. The co-working space, Creative Works, is building a community of creatives and connecting them with the art college and future careers. The co-working space is seen as a hub and focal point for the local creative community, fostering connections, networking, and collaborative opportunities and for the wider community, including underrepresented such as female entrepreneurs.

Capacity Development and Knowledge Sharing

There are many examples of innovative and proactive approaches being taken across the Tri-Borough partnership, within individual local authorities and by other important actors. The learning from some of these approaches could represent scalable and replicable interventions and actions that, if shared more widely, could produce actionable outcomes for other partners and projects. One example is the repurposing of space to build a community of creatives and connect them to the opportunities within the area. There were several actions taken to respond to community needs including agile membership models and making the access to space more inclusive. This adaptive management approach led to changes in practice such as on-demand day passes that supported broader social and economic goals such as encouraging and enabling female entrepreneurship.

Another example is an investment dashboard and tracker that aligns a pipeline of investable opportunities with external enquiries. This dynamic approach supports the council to quickly and accurately match investment opportunities with the assets available.

The Tri-borough partnership has made bold decisions regarding investment and borrowing, demonstrating an entrepreneurial mindset and culture. It understands the importance of delivering measurable results to secure funding and support from investors. Additionally, the ability to show that these investments have generated significant private sector investment can serve as a compelling argument for continued funding and for expanding services to other areas. This can also help persuade key partners to take measured risks for long-term rewards.

The approach emphasises the importance of integrating potential investments into the existing landscape, rather than developing standalone projects. Additionally, the team engages in continuous market engagement through investor events, which feeds into the tracking and monitoring process. Overall, this comprehensive and strategic approach positions the inward investment service as a valuable asset for the wider sub-regional partnership. It allows the team to follow up on potential pipeline opportunities, categorising inquiries as serviceable, non-serviceable, or unserviceable.

These examples demonstrate two distinct yet complementary strategies that effectively advance the Borough's goals. Together, these approaches reflect a strong commitment to innovation and proactive solutions that enrich the overall vision for the area.

6. Conclusions

There are several impressive initiatives around investment in the Upper Lee Valley tri-borough partnership (TBP), including the UK Innovation Corridor partnership, and the university campus in Waltham Forest. The Productive Valley Fund aims to support businesses in production, manufacturing, creative, and low-carbon industries through capital loans to facilitate their growth and development. Priorities include creating and improving workspace, investing in new production methods and equipment, and generating jobs and apprenticeships, with a focus on green industries. Despite the proactive and effective stance taken by the TBP, there are challenges. The availability and affordability of suitable

commercial premises appears to be perceived as a significant barrier. Funding and securing government attention and support has been challenging, but the collective efforts of the partnership has built a strong brand and narrative around the corridor as a hub for the knowledge economy, life sciences, and technology.

The university campus, aims to have a civic purpose, supporting local opportunities and raising aspirations, as well as attracting international students. The university works closely with the local council to align its priorities and plans with local needs, using data and community intelligence to inform these plans, though it faces challenges in systematically capturing and analysing qualitative local insights. Attracting investment and students to the area is a key priority, with the university seen as an anchor institution that can contribute to the local economy and community. Challenges include aligning different stakeholder agendas and ensuring inclusive growth, with the university implementing measures like scholarships and apprenticeships to support social mobility and access for disadvantaged groups. Whilst the university campus is a valuable asset to the area, it is important to ensure that the educational and training needs of the local community (whose needs may not be met by the university offer) remains critical.

The three boroughs have a unique range of physical and human assets and strengths to be bolstered through strategic investment and partnerships. Many 'best-practices' are already being undertaken, such as in the areas of natural and creative assets, as well as the use of data to inform these decisions. Examples such as these, show the advantages of joined-up and less isolated or purely competitive approaches to place-based development. It is certainly the case that there are significant challenges around housing affordability and commercial land-use, and these will be fundamental to addressing poverty, employment, social and health outcomes of the three local areas. These complex dynamics, which are interconnected with local infrastructure, and embedded within the Greater London multilevel governance architecture can be better understood, and opportunities better identified. For these reasons, we highlight the following recommendations:

Overall, the three boroughs have pioneered a collaborative and joined-up approach to solving common challenges and mutually benefit from opportunities. Nonetheless, as we have seen, much of local and place-based policymaking is heavily subject to programme, project and policy churn and change. This is why maintaining these institutional relationships and formalised structures is so fundamental to the success of the ULV area. So, while there are many successes enacted by these partnerships, **the first recommendation is continuity of the collaborative approach, and furthering and deepening cooperation, particularly on adaptable governance models and knowledge sharing.** This would bolster and ready the responsiveness and coordination of the boroughs to deal with common challenges and identify areas for productivity enhancements earlier and more effectively.

In order to identify these opportunities, however, **data collection needs to be considered in a more comprehensive, timely and consistent manner**. For instance, the use of administrative data, such as on PAYE or financial transactions data, are able to be collected rapidly based on user interactions with public services, and so provides up-to-date insights into the resident population and their needs. The boroughs could also collaborate focus on

sectoral distinctions in data collection and analysis to provide evidence bases for potential improvements in priority sectors and businesses. Sharing this information more widely could also help attract investment in high-growth sectors and boost employment creation in the boroughs.

In terms of the physical spaces and land use across the three boroughs, there are key challenges around capacity, particularly, the affordability of rental and suitability of commercial properties. Therefore, **the investment and creation of new viable and sustainable workspaces, including both industrial and more modern co-working spaces**, tailored to the employment base and with a view to providing an innovative ecosystem in which equipment and production methods can be upgraded. Accompanying infrastructure should support fast transport and digital connectivity to enable these transitions. Overall, this would help to generate green-job growth and improve conditions for innovation.

Lastly, **strong partnerships with higher and further education institutions** are central to building the local skills base, not only of higher-skilled young people, but also to guard against the persistence of low-wage work, which is typically undertaken by those with fewer qualifications, in the boroughs. Clearer cooperation between labour market intermediaries, businesses and local authorities can improve employment prospects within local areas, and improve signposting to boost the retention of local talent. Improved physical infrastructure as mentioned above will also improve the chances of this. Finally, all of this will be galvanized by stronger local messaging centred around a developing cohesive narrative and purpose of the ULV, its residents and pride of place and community.

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Appendix A1: Middle Super Output Area Places Names and Maps

Table A1: MSOA Place names by borough

No.	MSOA name	No.	MSOA Name	No.	MSOA Name
	Waltham Forest		**Enfield**		**Haringey**
1	Chingford Green West	34	Enfield Wash	67	Bounds Green
2	Chingford Green East	35	Brimsdown Avenue	68	Roundway
3	Friday Hill	36	Chase Side	69	Tottenham Bruce Castle Park
4	Larkswood	37	Enfield Town North	70	Wood Green North
5	Chingford Mount	38	Chase Farm & The Ridgeway	71	Scotch Estate
6	South Chingford	39	Cockfosters & Hadley Wood	72	Alexandra Park
7	Highams Park East	40	Southbury East	73	Noel Park
8	Highams Park West	41	World's End	74	Bruce Grove North
9	Higham Hill	42	Brimsdown & Ponders End	75	Tottenham North West
10	Fulbourne Road & Walthamstow Forest	43	Enfield Town South & Bush Hill Park	76	Lordship Lane & Broadwater Farm
11	Lloyd Park	44	Southbury West	77	Muswell Hill North
12	William Morris	45	Grange Park	78	Tottenham Lea Valley
13	Wood Street	46	Ponders End South	79	Wood Green South
14	Blackhorse Road	47	Oakwood Park & Highlands	80	Fortis Green & Coldfall
15	Upper Walthamstow	48	Southgate	81	Bruce Grove South
16	Walthamstow Central	49	Bury Street West & Village Road	82	Downhills Park
17	Walthamstow Market & South Grove	50	Winchmore Hill	83	Hornsey East
18	Markhouse & St James Park	51	Lower Edmonton North	84	Muswell Hill South
19	Whipps Cross	52	Haslebury North	85	Hornsey West
20	Baker's Arms	53	Lower Edmonton South	86	Harringay Ladder North

21	Leytonstone North	54	Palmers Green East	87	Tottenham Green West
22	Lea Bridge	55	Haslebury South	88	Tottenham Green East
23	Leyton North	56	Southgate Green	89	West Green & St Ann's
24	Leytonstone East	57	Palmers Green West	90	Harringay East
25	Leyton East	58	Edmonton Green	91	Hornsey Vale
26	Leyton South	59	Tatem Park	92	South Tottenham
27	Leytonstone South West	60	New Southgate & Arnos Grove	93	Highgate Wood
28	Leytonstone South East	61	Upper Edmonton East & Meridian Water	94	Harringay Ladder South
	Enfield	62	Bowes	95	Harringay Warehouse District & Vartry
29	Bullsmoor & Freezywater	63	Broomfield Park	96	Crouch End West
30	Turkey Street	64	Upper Edmonton West	97	Crouch End East
31	Enfield Lock		**Haringey**	98	Highgate East
32	Chase & Crews Hill	65	Bowes Park	99	Stroud Green
33	Carterhatch & Forty Hall	66	Northumberland Park	100	White Hart Lane

Figure A1: Upper Lee Valley Boroughs, GVA at Middle Super Output Area (MSOA) level
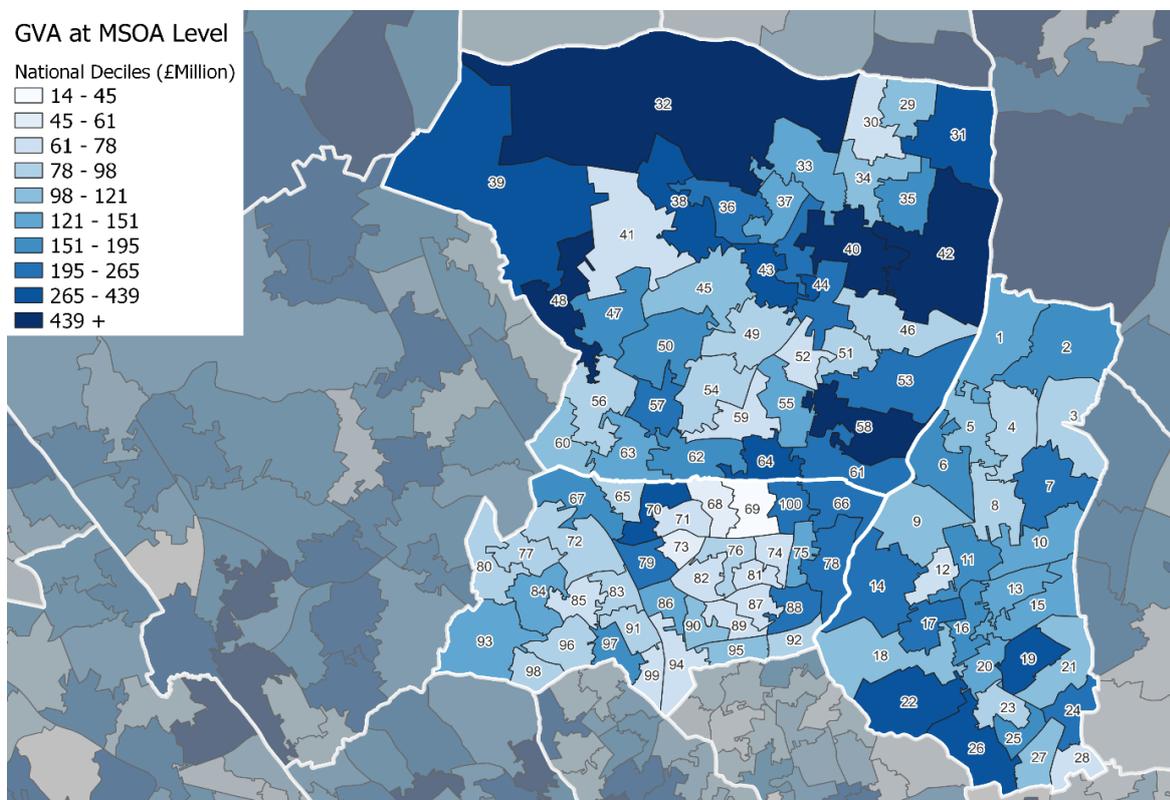
Source: Regional Accounts, UK small area GVA estimates on Nomis, https://www.nomisweb.co.uk/

Figure A2: Upper Lee Valley Boroughs, Median House Prices in MSOAs
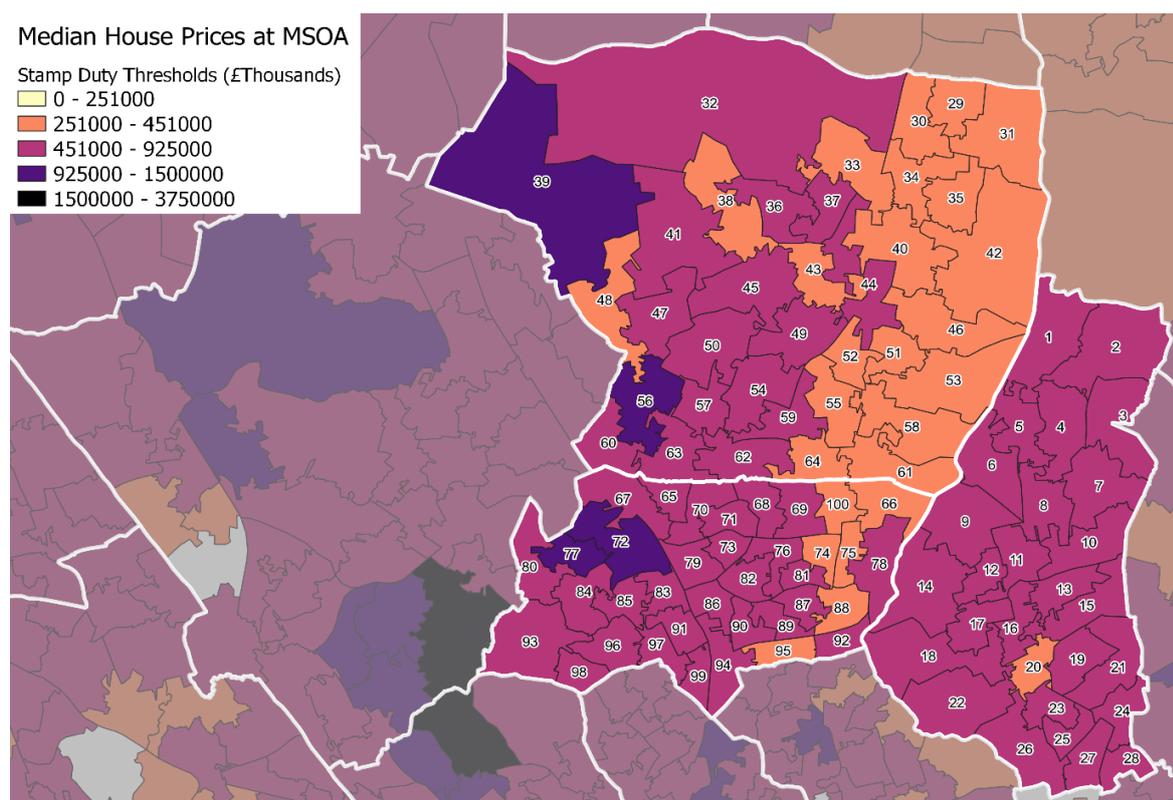
Source: ONS (2024b). Housing Affordability. See Table A1 for MSOA place names.

Appendix A2: Productivity Metrics and Drivers

We analyse business cycle turning points to help understand how resilient the boroughs were in their recovery from the 2007-08 financial crisis. In Table A2 we show that in Haringey both GDP and GDP per head contracted from the 2007 peak turning points to 2009 trough with a deeper recession in GDP per head of -12.2% (the UK experienced -6.3% contraction), compared to -7.4% for GDP (compared to the UK fall of -4.8%). Productivity (GVA/ job) fell between 2007-08 by -0.66%. In Figure 2 we see that Haringey's productivity continued to increase from 2009 up to 2011, this coincided with increasing GDP (see Figure A4) and contracting employment in Haringey (see Figure A5). The employment level then increases after 2011 with the average annual rate of increase in jobs between 2010-14 of 3%, but the average annual rate falls to -0.6% between 2015-19. This results in a higher rate of growth in productivity in the 2015-19 sub-sample.

Productivity levels over time as measured by GVA/ hour are shown in Figure A3. Haringey productivity reaches it peak turning point much later than the other boroughs in 2010 and contracts until a trough in 2014, the average annual increase between 2010-14 is 0.14% (a 12% increase between 2009-10 makes this average positive). Similar to GVA per job, productivity (GVA per hour) has low growth following the 2008 recession due to a large average annual increase in hours worked between 2010-14 of 3.4% (see Figure A6), in the following 5 year sub-sample hours worked decreases so then we see an increase in the growth

rate of productivity between 2015-19 of 1.4% per year. Productivity (GVA/ job) has the greatest hit during the covid-19 pandemic recession between 2019-20 of -24.5%, during the pandemic the number of jobs grew by 9% contributing to this large contraction in productivity.

Table A2: Haringey Business Cycle Turning Points

	Peak	Trough	% Loss during GFC (Peak-Trough)	Annual Growth rate up to GFC (2003-07)	Annual Growth rate after recession (2010-14)	Annual Growth rate to CV-19 (2015-19)	% Loss during CV-19 (2019-2020)	Annual Growth rate (2003-2022)
Haringey GDP	2007	2009	-7.37	2.69	4.15	0.25	-17.4	1.72
Haringey GDP/head	2007	2009	-12.2	1.6	2.63	-0.09	-16.1	0.95
Haringey GVA/job	2007	2008	-0.66	1.6	0.49	0.65	-24.5	0.21
Haringey Jobs	2006	2010	-12.7	1.48	3.03	-0.61	8.95	1.66
Haringey GVA/hour	2010	2014	-10.8	1.36	0.14	1.41	-15.3	-0.19
Haringey Hours	2006	2010	-17.3	1.98	3.43	-1.13	-2.81	1.86
Haringey Income /head	2007	2009	-4.99	3.19	0.91	2.06	-2.36	1.41

The Enfield business cycle statistics are in Table A3. The majority of peak turning points are reached in 2007 apart from the employment and hours worked series which reach their peak a year later in 2008. Most series reach the trough in 2009 with hours and income 2 years later in 2011. There is a deeper recession in GDP per head of -16.8%, compared to -13.8% for GDP. Productivity (GVA/ job) reaches its peak in 2007 and then contracts by -11.9%, from Figure 2 we see that Enfield's productivity does not recover the 2007 level up with the available data ending in 2022. Again the growth in employment is strong (see Figure A5), with the average annual rate of increase in jobs between 2010-14 of 2.75% and 0.9% between 2015-19. Productivity continues to contract after the 2008 recession in Enfield but reaches and average annual growth rate of 1.08% in the 2015-19 sub-sample.

Productivity levels over time as measured by GVA/ hour are in Figure A3. Enfield has a deep recession in productivity with a -18.4% fall between 2007-09, followed by an average annual fall of -1.4% between 2010-14 as over this sub-sample hours worked are increasing by 4% per year (see Figure A6 with a large increase between 2013-14 of 20%). There is a fall in hours

worked over the 2015-19 sub-sample and combined with increasing GDP (see Figure A4), this helps productivity (GVA per hour) increase by an average annual rate of 3.14% between 2015-19. There is a large fall in hours worked over the covid-19 pandemic of -13.4%, this series is slow to recover, see Figure A5. Income has grown at an average annual rate of 1.3% over the full sample with stronger growth before the 2008 recession.

**Table A3: Enfield Business Cycle Turning Points**

	Peak	Trough	% Loss during GFC (Peak-Trough)	Annual Growth rate up to GFC (2003-07)	Annual Growth rate after recession (2010-14)	Annual Growth rate to CV-19 (2015-19)	% Loss during CV-19 (2019-2020)	Annual Growth rate (2003-2022)
Enfield GDP	2007	2009	-13.8	2.74	3.12	1.55	-14.5	0.88
Enfield GDP/head	2007	2009	-16.8	1.97	1.53	1.01	-14	0.11
Enfield GVA/job	2007	2009	-11.9	2.43	-0.5	1.08	-11.2	0.04
Enfield Jobs	2008	2009	-3.59	0.39	2.75	0.87	-4.31	0.83
Enfield GVA/hour	2007	2009	-18.4	2.86	-1.4	3.14	-1.84	0.08
Enfield Hours	2008	2011	-4.98	-0.28	4.1	-0.58	-13.4	0.89
Enfield Income /head	2007	2011	-7.64	2.74	0.36	2.25	-0.8	1.33

The output (GDP) loss over the financial crisis of -13.6% in Waltham Forest is shown in Table A4 with a deep recession between the peak turning point of 2007 and trough of 2009. The recession in prosperity (GDP per head) was deeper with a -18.5% loss over 3 years (the peak turning point was reached a year earlier in 2006), with an earlier recession in employment with a -10.5% loss. The recession in productivity (GVA/hour) was also deep at -17.8% over two years. A recovery in jobs and hours followed the financial crisis with 3% average annual growth between 2010-14 for employment and 3.5% for hours. This lead to more subdued annual average productivity growth in both measures of around 0.4%. With continued growth of jobs and hours through the sub-sample 2015-19, productivity growth remains low with 0.02% average annual increase for GVA/job and 0.1% increase for GVA/hour.

Table A4: Waltham Forest Business Cycle Turning Points

	Peak	Trough	% Loss during GFC (Peak-Trough)	Annual Growth rate up to GFC (2003-07)	Annual Growth rate after recession (2010-14)	Annual Growth rate to CV-19 (2015-19)	% Loss during CV-19 (2019-2020)	Annual Growth rate (2003-2022)
Waltham Forest GDP	2007	2009	-13.6	3.12	4.23	1.31	-19.4	1.59
W. Forest GDP/head	2006	2009	-18.5	2.07	2.44	0.55	-19	0.54
W. Forest GVA/job	2007	2009	-17.8	4.86	0.38	0.02	-15.2	0.24
W. Forest Jobs	2005	2007	-10.5	-1.1	3.07	1.58	-5.52	1.34
W. Forest GVA/hour	2007	2009	-17.1	4.89	0.37	0.1	-0.42	-0.1
W. Forest Hours	2005	2008	-16.5	-0.82	3.47	2.07	-19.5	1.91
W. Forest Income /head	2008	2012	-7.99	2.07	0.81	3.21	-3.75	1.34

Figure A3: Upper Lee Valley Boroughs, Real Productivity (GVA/ hour)
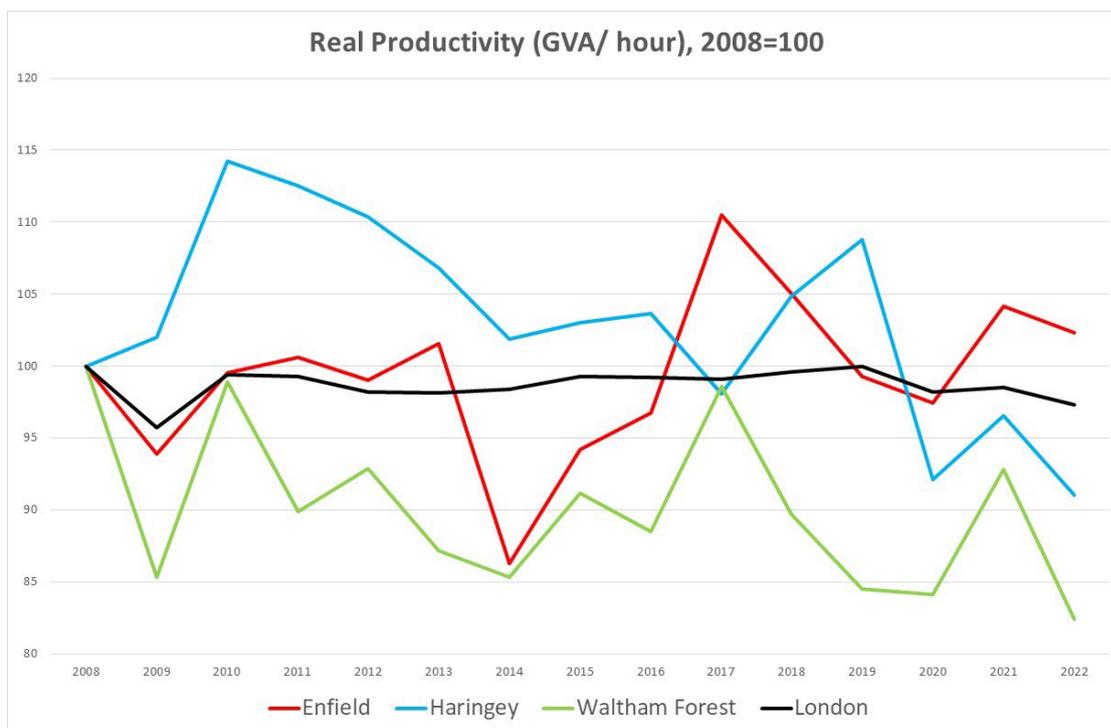
Source: ONS (2024e), Local Authority Productivity.

Figure A4: Upper Lee Valley Boroughs, Real Output

Output (Real Gross Value Added), 2008=100
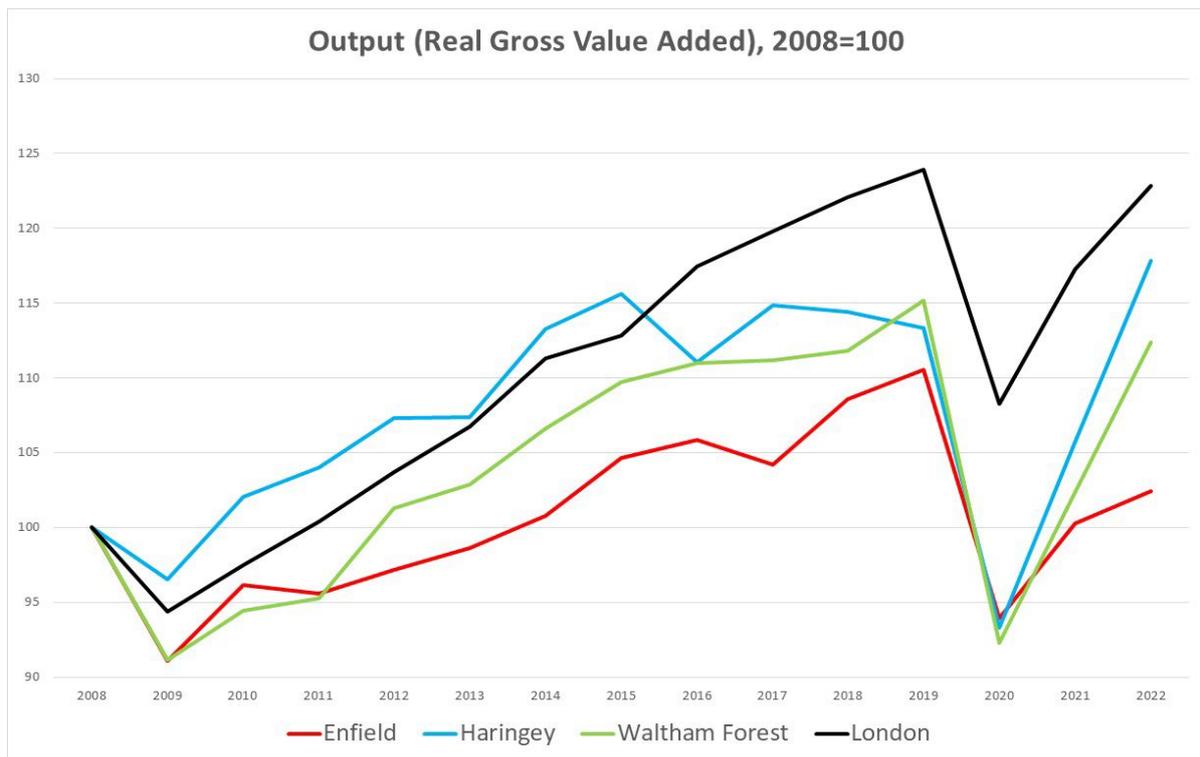
Source: ONS (2024c) Sub-regional GDP.

Figure A5: Upper Lee Valley Boroughs, Employment

Employment (Productivity Jobs Series), 2008=100
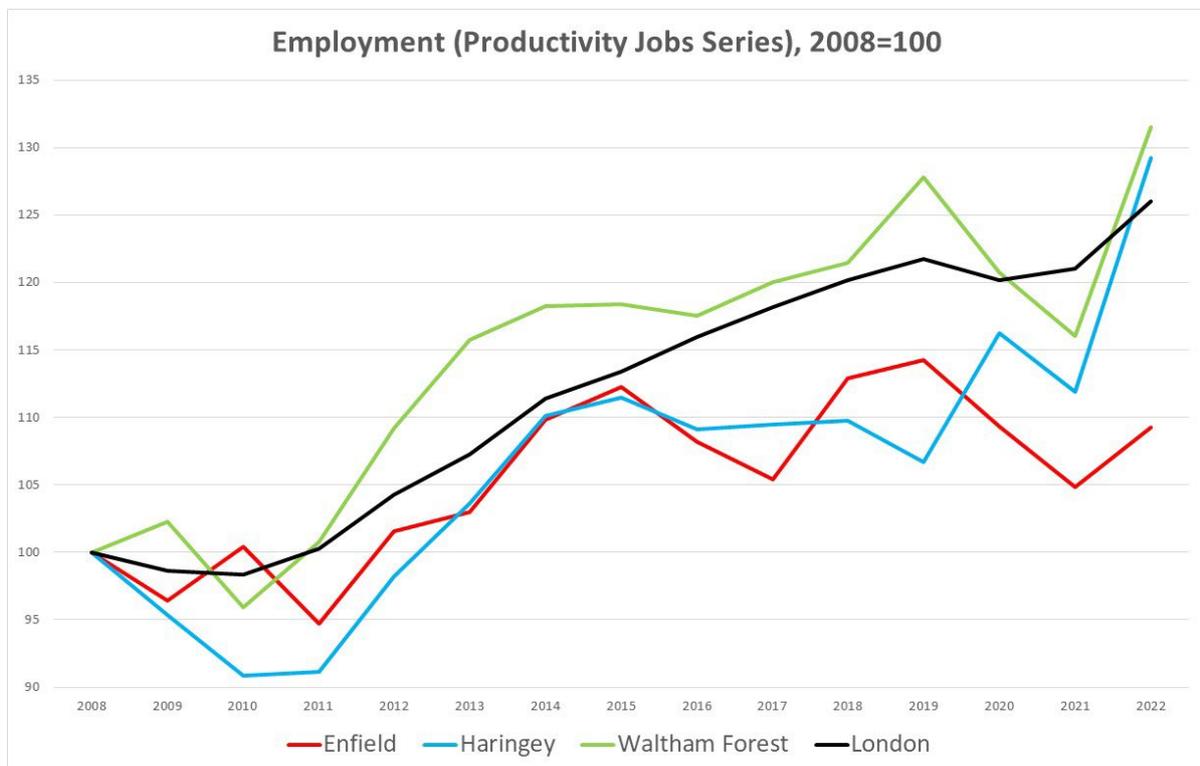
Source: ONS (2024e), Local Authority Productivity.

Figure A6: Upper Lee Valley Boroughs, Hours worked per week
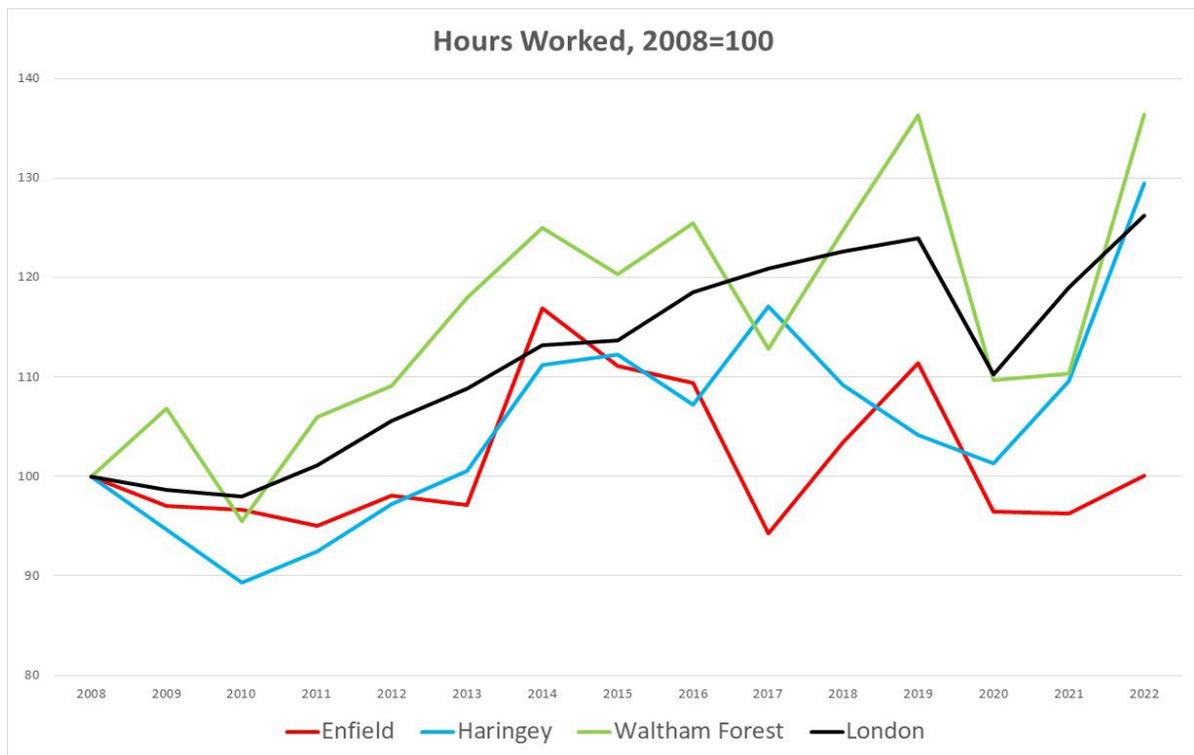
Source: ONS (2024e), Local Authority Productivity.

Table A5: Scorecard for Haringey's Drivers of Productivity

Haringey (London)		Growth (%, average annual growth rates)		
Economy	2022 Level	Short term (2021-2022)	Medium term (2017-2022)	Long term (2008-2022)
UK Productivity (GVA/hour)	39.7	0.1	0.7	0.6
Productivity, GVA/ hour (£)	**28.6** (50.6)	**-5.7** (-1.2)	**-1.1** (-0.4)	**-0.5** (-0.2)
Productivity, GVA/ filled job (£)	**44,352** (83,289.3)	**-3.5** (0.7)	**-1.8** (-0.6)	**-0.2** (-0.1)
GDP per capita (£)	**20,689** (63,407)	**11.2** (4.2)	**2.3** (0.6)	**1.2** (0.8)
GDHI per head (£)	**33,461** (32,330)	**-2** (-2.3)	**1** (0.2)	**0.8** (0.6)
Gross median weekly pay (£) (residents)	**722.1** (766.6)	**-5.1** (-3)	**-0.1** (0.2)	**-0.5** (-0.4)
Drivers of productivity				
Businesses Performance				
Export Intensity (%)-ITL3	**42.6** (41.9)	**-2.6** (12)	-	-
Rate of New Business (%)	**14.5** (12.7)	**-1.8** (0.3)	-	-
Skills & employment				
High skilled (% RQF4+)	**56.2** (58.9)	**0.2** (0.03)	**0.44**	**1.08**
No Qualifications (%)	**6.4** (5.6)	**-2.2** (0.13)	**-1.14**	**-1.36**
Employment Rate (%)	**78** (76.2)	**1.5** (0.5)	**2.02** (0.47)	**1.11** (0.47)
Health & wellbeing				
Activity Rate (%)	**80.5** (82.9)	**0.3** (-0.58)	**1.38**	**0.93**
Inactive due to illness (%)	**23.9** (23.9)	**11.2** (-2.3)	**1.92**	**0.43**
Working Age (%)	**70.9** (66.9)	**-0.3** (2)	**-0.11**	**0.1**
Investment, Infrastructure & Connectivity				
4G connected (%)-ITL3	**98.8** (98.2)	**3** (2.3)		
Fibre connected (%)-ITL3	**27.1** (43.6)	**1.8** (12.2)		
GFCF per job (£), 2020-ITL3	**12,000** (14,075)	**-8.6** (-9.2)	**-8.3** (-0.6)	**-2.3** (-0.007)
ICT per job (£), 2020-ITL3	**509** (589)	**-6.2** (-5.4)	**-5.7** (7)	**-1.2** (-1)
Intangibles per job (£), 2020-ITL3	**3,907** (3,396)	**-14.9** (-2.3)	**-9.9** (-1.5)	**3.8** (1.6)

Note: ITL3 next to the indicator signifies that it is for the ITL3 sub-region for Haringey and Islington (TLI43). Gross Fixed Capital Formation (GFCF) is whole economy investment for the year 2020, the first difference is for 2019-2020, the medium-term 2017-2020 and long-term 2008-2020.

Table A6: Scorecard for Enfield's Drivers of Productivity

Enfield (London)		Growth (%, average annual growth rates)		
Economy	2022 Level	Short term (2021-2022)	Medium term (2017-2022)	Long term (2008-2022)
UK Productivity (GVA/hour)	39.7	0.1	0.7	0.6
Productivity, GVA/ hour (£)	**43.8** (50.6)	**-1.7** (-1.2)	**-1.4** (-0.4)	**0.4** (-0.2)
Productivity, GVA/ filled job (£)	**64,156** (83,289.3)	**-2** (0.7)	**-0.8** (-0.6)	**-0.6** (-0.1)
GDP per capita (£)	**28,548** (63,407)	**2.1** (4.2)	**0.5** (0.6)	**-0.1** (0.8)
GDHI per head (£)	**25,516** (32,330)	**-2.1** (-2.3)	**0.5** (0.2)	**0.6** (0.6)
Gross median weekly pay (£) (residents)	**709** (766.6)	**-2.1** (-3)	**0.8** (0.2)	**-0.1** (-0.4)
Drivers of productivity				
Businesses Performance				
Export Intensity (%)	**17.1** (41.9)	**-2.9** (12)	-	-
Rate of New Business (%)	**13** (12.7)	**-4** (0.3)	**-**	-
Skills & employment				
High skilled (% RQF4+)	**48.1** (58.9)	(-0.1)	-	-
No Qualifications (%)	**10.2** (5.6)	**-**	-	-
Employment Rate (%)	**70.2** (76.2)	**-0.2** (0.5)	**-**	**-**
Health & wellbeing				
Activity Rate (%)	**75.3** (82.9)	**1.1** (1.7)	**-**	**-**
Inactive due to illness (%)	**24** (23.9)	**8.6** (24.5)	-	-
Working Age (%)	**64.1** (66.9)	**-0.2** (-0.4)	-0.2 (-)	-1.2 (-)
Investment, Infrastructure & Connectivity				
4G connected (%)	**98.2** (98.2)	**1.9** (2.3)		
Fibre connected (%)	**5.1** (43.6)	**41.7** (38.9)		
GFCF per job (£), 2020	**9,292** (14,075)	**-6.6** (-9.2)	**7.2** (-0.6)	**2.4** (-0.007)
ICT per job (£), 2020	**702** (589)	**-2.5** (-5.4)	**16.1** (7)	**7.9** (-1)
Intangibles per job (£), 2020	**1,651** (3,397)	**18.3** (-2.3)	**9.1** (-1.5)	**7.3** (1.6)

Table A7: Scorecard for Waltham Forest's Drivers of Productivity

Waltham Forest (London)		Growth (%, average annual growth rates)		
Economy	2022 Level	Short term (2021-2022)	Medium term (2017-2022)	Long term (2008-2022)
UK Productivity (GVA/hour)	39.7	0.1	0.7	0.6
Productivity, GVA/ hour (£)	**35.5** (50.6)	**-11.2** (-1.2)	**-3.2** (-0.4)	**-1** (-0.2)
Productivity, GVA/ filled job (£)	**51,454** (83,289.3)	**-3.1** (0.7)	**-1.1** (-0.6)	**-0.8** (-0.1)
GDP per capita (£)	**20,492** (63,407)	**9.9** (4.2)	**1.3** (0.6)	**0.6** (0.8)
GDHI per head (£)	**25,878** (32,330)	**-1.5** (-2.3)	**0.7** (0.2)	**1.1** (0.6)
Gross median weekly pay (£) (residents)	**757** (766.6)	**-3.9** (-3)	**2.6** (0.2)	**0.2** (-0.4)
Drivers of productivity				
Businesses Performance				
Export Intensity (%)	- (41.9)	- (12)	-	-
Rate of New Business (%)	**14.7** (12.7)	**-1.2** (0.3)	-	-
Skills & employment				
High skilled (% RQF4+)	**54.1** (58.9)	- (-0.1)	-	-
No Qualifications (%)	**8** (5.6)	-	-	-
Employment Rate (%)	**69.6** (76.2)	**-6.7** (0.5)	-	-
Health & wellbeing				
Activity Rate (%)	**74.8** (82.9)	**-6.5** (1.7)	-	-
Inactive due to illness (%)	**19.1** (23.9)	**5.9** (24.5)	-	-
Working Age (%)	**69.2** (66.9)	**-0.3** (-0.4)	-	-
Investment, Infrastructure & Connectivity				
4G connected (%)-ITL3	**94.5** (98.2)	**4.2** (2.3)		
Fibre connected (%)	**46.4** (43.6)	**70.9** (38.9)		
GFCF per job (£), 2020-ITL3	**7,938** (14,075)	**-12.1** (-9.2)	**-6.3** (-0.6)	**0.6** (-0.007)
ICT per job (£), 2020-ITL3	**258** (589)	**-2.2** (-5.4)	**-10.1** (7)	**0.1** (-1)
Intangibles per job (£), 2020-ITL3	**975** (3397)	**-3.9** (-2.3)	**-0.3** (-1.5)	**2** (1.6)

Note: ITL3 next to the indicator signifies that it is for the ITL3 sub-region for Redbridge and Waltham Forest (TLI53). Gross Fixed Capital Formation (GFCF) is whole economy investment for the year 2020, the first difference is for 2019-2020, the medium-term 2017-2020 and long-term 2008-2020.

Table A8: Residents and Workplace Flows, Census 2021

Workers	Haringey	Enfield	Waltham Forest
People working in the borough	116,110	133,325	119,521
Workers travelled within the borough	11,822	28,982	16,763
Lived and worked in borough	88,194	99,174	94,066
Travelled from another area	27,916	34,151	25,455
Most popular areas commuted from	Enfield (7,077) Barnet (3,182) Hackney (2,261)	Haringey (4,842) Broxbourne (4,139) Barnet (3,853)	Redbridge (4,403) Newham (3,383) Enfield (1,864)
Residents	**Haringey**	**Enfield**	**Waltham Forest**
Working people living in the borough	134,388	143,861	140,380
People who worked from home or no fixed place of work	76,372	70,192	77,303
Travelled to another area	46,194	44,687	46,314
Most popular areas commuted to	Westminster (6,469) Camden (5,837) Enfield (4,842)	Haringey (7,077) Barnet (5,733) Camden (3,405)	Westminster (4,964) Newham (3,615) Tower Hamlets (3,549)

Source: ONS, Census Origin Destination Visualisation: https://www.ons.gov.uk/visualisations/censusorigindestination/

Appendix A3: Data Tool Capitals Tables

Table A9: Physical Capital Indicators in 10 London Boroughs

	Median House Prices (£), 2024	Electricity Consumption (kwh/meter), 2023	Broadband availability (Gb), 2024	Population Density (resident/ km sqrd), 2023	Supermarkets (per 10,000 population), 2023	UK Rank
Haringey	**591,540**	**2961.7**	**87.4**	**8895**	**1.85**	**16**
Enfield	**448,766**	**3459.1**	**88.8**	**4060**	**1.52**	**51**
Waltham Forest	**512,963**	**2987.3**	**93.1**	**7176**	**1.69**	**25**
Islington	675,032	2708.8	92.2	14964	3.32	4
Redbridge	501,860	3548.7	91.7	5613	1.39	22
Lambeth	538,515	2808.4	89.5	11890	2.8	10
Hackney	610,667	2904.1	88.5	13937	1.81	8
Newham	407,282	2954.5	88.6	10172	1.31	27
Tower Hamlets	495,186	3013.7	83.9	16648	2.22	7
Barnet	586,982	3718.6	69.4	4589	1.9	28
UK Median	277,547	3315.9	83.7	575	2.71	
LN Median	528,890	3316.7	88.8	6269	2.15	
Productivity Correlation:						
LN (N=33)	0.4	0.14	-0.44	0.17	0.25	
UK (N=361)	0.51	0.19	0.13	0.22	0.25	

Source: see Table A5, variable sources.

Table A10: Intangible Capital Indicators in 10 London Boroughs

	Innovation LQ	Digital LQ	Patents/Firms (1000)	InnovateUK Grants/Firms (1000)	UK Rank
Haringey	**3.33**	**2.01**	**0.76**	**1.06**	**265**
Enfield	**2.83**	**1.19**	**0.94**	**0.48**	**351**
Waltham Forest	**2.7**	**1.54**	**0.66**	**0.81**	**336**
Islington	5.85	2.86	1.81	3.55	33
Redbridge	3.15	1.08	0.43	0.31	357
Lambeth	4.16	3.02	2.05	4.13	50
Hackney	4.85	3.11	1.13	3.07	53
Newham	3.65	1.48	0.38	1.04	310
Tower Hamlets	7.4	3.78	2.63	4.05	12
Barnet	3.31	1.52	1.53	0.88	291
UK Median	3.21	1.33	3.27	2.86	
London Median	3.64	1.7	1.45	1.23	
Productivity Correlation:					
London (N=33)	0.77	0.65	0.74	0.66	
UK (N=361)	0.51	0.36	0.13	0.11	

Table A11: Social Capital Indicators in 10 London Boroughs

Districts	Children in relative poverty (%), 2023	Population Change (%), 2011-2021	Museums (per 100,000 population), 2021	ONS well-being survey 2022/23			UK Rank
				Anxiety	Happiness	Life satisfaction	
Haringey	**17.1**	**3.5**	**0.76**	**3.27**	**7.17**	**6.97**	**316**
Enfield	**15**	**5.3**	**0.61**	**2.33**	**7.41**	**7.41**	**106**
Waltham Forest	**19.5**	**7.2**	**1.08**	**3.36**	**6.82**	**7.16**	**324**
Islington	18.8	4.8	4.16	3.8	7.2	7.25	306
Redbridge	16	10.1	0.32	3.09	7.63	7.59	76
Lambeth	18	4.6	2.2	3.45	7.5	7.63	192
Hackney	22.1	5	1.54	3.37	7.05	7.14	326
Newham	23.2	12.3	0.28	1.86	8	7.91	6
Tower Hamlets	26.5	18.1	4.19	3.26	6.87	7.32	232
Barnet	11.5	8.5	1.03	3.33	6.95	6.95	288
LN Median	15.4	7.2	1.52	3.41	7.32	7.37	
UK Median	18	5.2	4.02	3.25	7.42	7.48	
Productivity Correlation:							
LN (N=33)	-0.41	-0.07	0.61	0.27	-0.31	-0.22	
UK (N=361)	-0.36	0.21	0.08	0.17	-0.08	-0.02	

Table A12: Financial Capital Indicators in 10 London Boroughs

Districts	Prosperity (GDP per capita, £), 2022	Income per head (GDHIph, £), 2022	Gross Median Weekly Pay (£), 2023	Businesses births (%), 2023	High growth Business (%), 2023	UK Rank
Haringey	**20,689**	**33,461**	**727.8**	**12.7**	**3.5**	**30**
Enfield	**28,548**	**25,516**	**646.2**	**12.8**	**2.8**	**116**
Waltham Forest	**20,492**	**25,878**	**717.7**	**14.4**	**4.4**	**19**
Islington	120,410	38,628	811.2	16.3	8.4	4
Redbridge	20,643	25,089	669	14.7	4.4	26
Lambeth	50,630	32,669	797.4	12.6	8.1	8
Hackney	47,985	31,388	762.5	15.4	8.6	6
Newham	24,069	22,357	635.9	15.6	3.8	47
Tower Hamlets	116,712	29,182	766.5	14.0	7.0	10
Barnet	29,211	33,730	714.6	11.0	4.2	46
LN Median	30,962	29,182	724.5	12.5	4.8	
UK Median	29,380	21,359	603.8	10.4	4.2	
Productivity Correlation:						
LN (N=33)	0.55	0.6	0.41	-0.29	0.63	
UK (N=361)	0.27	0.48	0.57	0.00	0.33	

Table A13: Human Capital Indicators in 10 London Boroughs

Districts	Employment Rate (%) in 2023	Skills (RQF level 3+) in 2023	Dependency Ratio in 2023	Healthy Life Expectancy, 2018-20	Cigarette Smokers (%) in 2023	UK Rank
Haringey	**74.9**	**69.8**	**0.41**	**63.8**	**13.9**	**110**
Enfield	**67.9**	**57.7**	**0.56**	**63.1**	**14.1**	**274**
Waltham Forest	**73.7**	**75.1**	**0.44**	**65.6**	**6.6**	**36**
Islington	79.3	82.8	0.31	63.4	9.8	13
Redbridge	69	72.1	0.52	62.3	6.8	135
Lambeth	74.7	81	0.31	60.2	10.8	56
Hackney	81.5	80	0.36	60.9	8	21
Newham	71.1	65.4	0.39	62.0	13	162
Tower Hamlets	66.2	70.7	0.3	61.6	12.5	137
Barnet	67.8	69.8	0.55	65.1	8.9	156
LN Median	74.35	75.9	0.45	64.0	10.9	
UK Median	76.5	60.35	0.63	63.4	11.4	
Productivity Correlation:						
LN (N=33)	-0.19	0.24	-0.48	-0.05	-0.14	
UK (N=361)	0.18	0.28	-0.34	0.31	-0.25	

Table A14: Natural Capital Indicators in 10 London Boroughs

Districts	Industry	Commercial	Public Sector	Domestic	Transport	LULUCF Net Emissions	Agriculture	Waste	UK Rank
Haringey	**31.2**	**125.4**	**25.7**	**286.8**	**141.0**	**1.2**	**1.0**	**12.6**	**331**
Enfield	**84.1**	**123.8**	**43.0**	**365.5**	**419.1**	**1.3**	**3.8**	**163.2**	**319**
Waltham Forest	**42.4**	**70.2**	**30.2**	**269.6**	**175.3**	**-0.2**	**1.2**	**16.1**	**303**
Islington	24.8	227.8	47.1	213.8	103.6	1.1	0.6	10.5	355
Redbridge	22.7	63.6	33.9	328.0	258.1	1.0	1.4	15.3	274
Lambeth	37.9	170.1	105.8	319.3	197.7	1.6	1.0	14.6	353
Hackney	27.3	139.1	39.1	236.1	115.3	0.9	0.6	12.3	352
Newham	171.6	231.5	42.1	267.6	221.4	2.4	0.3	31.8	350
Tower Hamlets	45.1	505.5	71.0	210.3	216.9	1.3	0.6	15.3	356
Barnet	34.3	145.2	53.6	502.1	367.0	0.9	3.3	111.3	293
LN Median	37.9	141.7	43.0	269.6	197.7	1.1	1.2	21.8	
UK Median	75.8	66.6	23.2	188.3	263.0	0.2	44.8	38.1	
Prod. Corr.:									
LN (N=33)	-0.09	0.66	0.36	-0.39	-0.19	-0.1	0.12	-0.13	
UK (N=361)	-0.05	0.29	0.07	-0.05	-0.004	-0.02	-0.17	-0.01	

Source: DESNZ (2024). Greenhouse gas emission estimates in kt CO_2e in 2022.