

Oxfordshire Local Government Reorganisation

Economic Growth Report

October 2025

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Executive summary

Oxford is globally and economically significant

- Oxford is dominated by **high-tech, R&D, higher education industries** which are particularly sensitive to the benefits of agglomeration.
- Home to the **top-tier University of Oxford**, ranked among the top five universities worldwide (over £3bn in research income in FY23/24).
- The university has produced more than **205 spin-outs** since 2011, around 16% of the UK total.
- **The city has strong FDI momentum**; Oxford consistently ranks among the UK's top cities for FDI (ranked 6th in 2024).



128,000 jobs

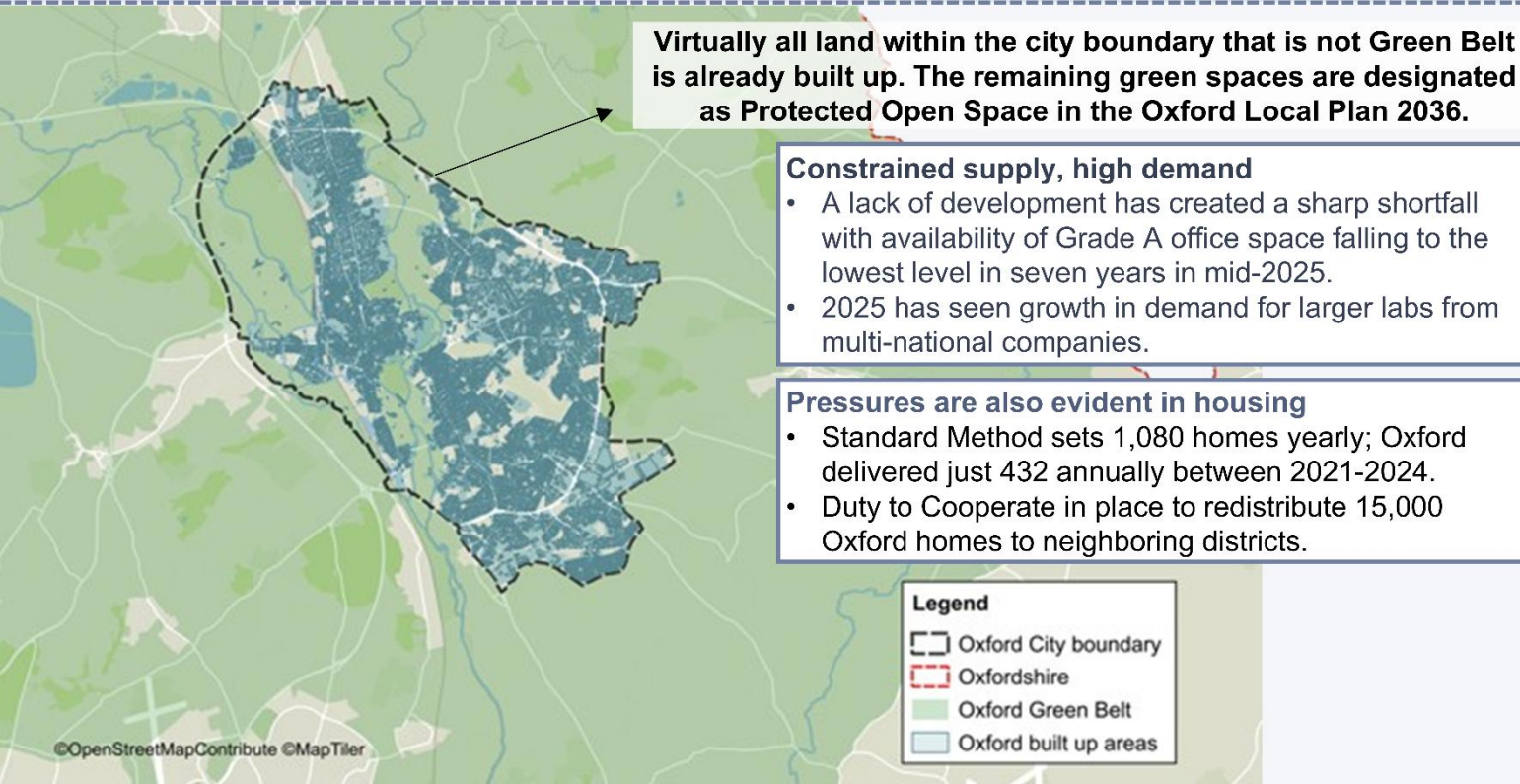


5,000 businesses



~£8.5bn GVA per year
(~35% of Oxfordshire total)

Oxford's land and boundary constraints are preventing growth



The evidence is clear: the edge-of-Oxford City is where businesses want to locate

With the city-centre constrained, the next best alternative is edge-of-city sites. High-value firms have consistent locational patterns – proximity to Oxford's research base but also space to grow, which only edge-of-city sites can provide.

Core locational preferences of high-value firms include:

- 1. Substantial plots of land** with space to grow*
- 2. Proximity to world-class research institutions**
- 3. Access to world class talent**
- 4. Amenities** that support productivity and retention
- 5. High-quality infrastructure and utilities**
- 6. Excellent public transport connectivity**
- 7. Critical mass and community**

**life sciences firms in particular*

Many leading companies have already chosen locations just on or outside the current city boundary:

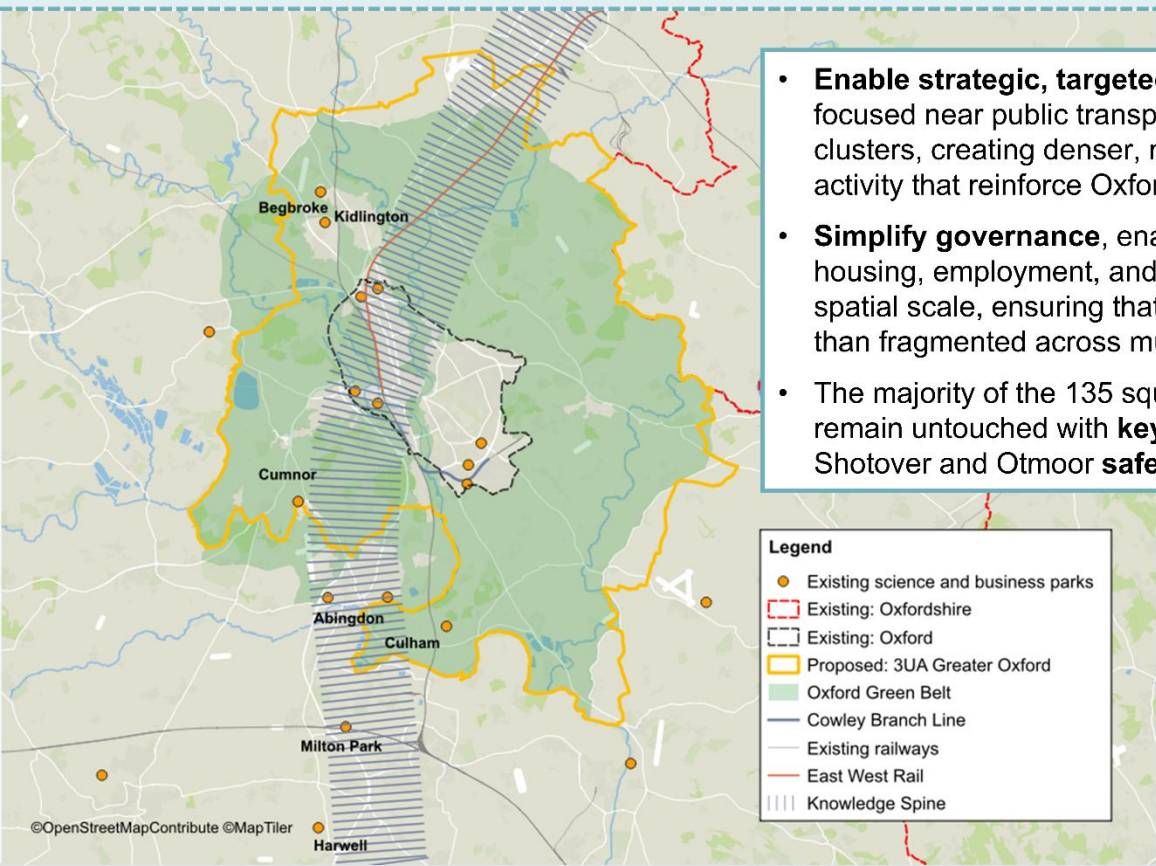
Tokamak Energy

Oxford NANOPORE Technologies

Adaptix

For many sectors, Oxford is the only viable cluster that they could locate in within the UK. While other locations in Oxfordshire exist for some businesses (e.g. Harwell), many occupiers prefer edge-of-city Oxford.

A 3UA model is the solution, expanding the boundary through a Greater Oxford (GO) authority directly addresses this constraint while unlocking land in the right places



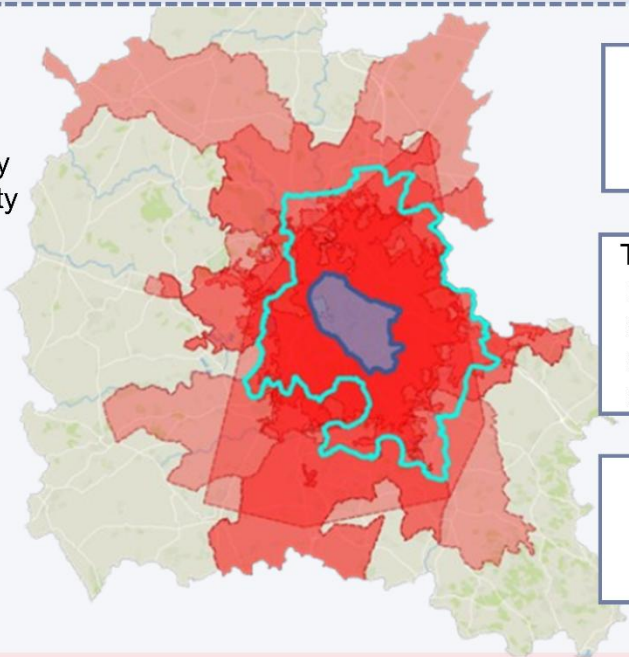
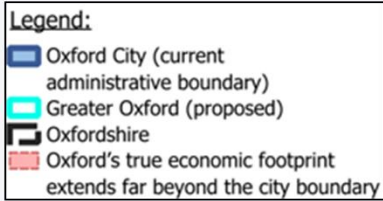
- **Enable strategic, targeted Green Belt release** focused near public transport and existing employment clusters, creating denser, more efficient patterns of activity that reinforce Oxford’s global competitiveness.
- **Simplify governance**, enabling integrated planning of housing, employment, and infrastructure at the right spatial scale, ensuring that growth is coordinated rather than fragmented across multiple districts.
- The majority of the 135 square miles Green Belt would remain untouched with **key ecological assets** such as Shotover and Otmoor **safeguarded**.

Not only does GO make sense, but the 3UA Northern Oxfordshire and Ridgeway UAs are also well justified, as the proposal enables each UA to focus on their distinct economic strengths.

GO better aligns with the city’s functional economy

Indicators overlayed in map:

- 30-min drive time
- 45-minute cycle
- 50 + commuter to Oxford City
- 100+ commuter to Oxford City
- Grouping of key Oxford business parks



Taken together, these map layers reveal a distinct concentration of activity within the proposed GO area.

The density of commuting patterns, employment hubs, and innovation clusters clearly demonstrates how economic networks extend across current administrative boundaries.

Governance and planning should reflect this functional geography rather than the more limited city boundary.

The 3UA model enables stronger region-wide growth than 2UA and 1UA proposals

Annual employment forecasts (compound annual growth rates):

3UA: 1.3%	2UA: 1.1%	1UA: 1.0%
<ul style="list-style-type: none">• GO: ~1.5% by unlocking R&D through green belt release and strategic sites, maximising agglomeration benefits.• Northern Oxfordshire: 1.3% via mid-tech, tourism and agriculture.• Ridgeway: 1.2% through coordinated growth at Harwell, Milton and Didcot.	<ul style="list-style-type: none">• Oxford and Shires: 1.1% as diluted focus by combining urban and rural priorities, making green belt release harder.• Ridgeway: moderates from 3UA to 1.1% as it must absorb Oxford commuter 2009 while pursuing Science Vale and Didcot expansion.	<ul style="list-style-type: none">• A single county-wide UA grows slowest (~1.0%) as competing priorities hinder bold, place-specific strategies.• Growth is steady but incremental; 2UA performs slightly better with clearer priorities and stronger place branding.

This growth would accelerate housing delivery, helping retain talent in the area while easing affordability pressures



The wider GO boundary not only enables higher economic growth but also allows Oxford to meet constrained and increased housing needs, easing pressure on surrounding districts to accommodate Oxford’s unmet demand.

Oxford faces a severe affordability crisis; average house prices exceed 11× average earnings.

Under-delivery of housing makes it hard to retain staff in key sectors (NHS, academia, tech).

~40,000 mixed-tenure homes could be delivered through GO over 15 years.

This would help ease affordability pressures, retain skilled workers and ease pressure on surrounding districts.

Job and housing growth are aligned, with housing estimates from each proposal’s job growth analysis demonstrating that forecast homes are achievable and realistic when compared with existing targets and standards.

The 3UA delivers additional, more productive growth compared to the other proposals

Not only does the 3UA proposal deliver the largest GVA uplift, being

£4.7bn

higher per year than the 2UA option by 2050 – but it also concentrates jobs closer to Oxford’s core, increasing density and productivity. This results in an agglomeration benefit per worker being

£930

higher in 2050 under the 3UA proposal than under the 2UA proposal.

	3UA	2UA	1UA*
Baseline (2023)			
Employment (2023)	505,100	505,100	505,100
Annual GVA (2023) (£bn)	£38.4	£38.4	£38.4
Growth (2023-2050)			
Employment growth (2023-2050)	218,000	180,000	153,000
Forecast impacts (2050)			
Annual direct GVA (2050) (£bn)	£64.1	£59.3	£56.8
Annual GVA from agglomeration (2050) (£bn)	£0.83	£0.12	£0.00
Annual total GVA (2050) (£bn)	£64.9	£59.5	£56.8
Agglomeration benefit per worker (2050, relative to 2023)	£1,083	£155	£0.00
NPV over 27-year period (2023-2050), total additional from 2023			
Direct GVA (£bn)	£163.5	£141.2	£125.7
GVA from agglomeration (£bn)	£5.3	£0.8	£0.0
Total GVA NPV (£bn)	£168.8	£142.0	£125.7
NPV over 27-year period (2023-2050), relative to reference case			
Direct GVA relative to reference case (£bn)	£37.8	£15.5	Reference case
GVA from agglomeration relative to reference case (£bn)	£5.3	£0.8	Reference case
Total GVA NPV relative to reference case (£bn)	£43.1	£16.3	Reference case

*West Berkshire is added to the 1UA option with historic rates of employment growth continuing to 2050 to allow for direct comparison with the 3UA and 2UA options

By adopting the 3UA proposal, the county will move from constraint to capacity, driven by clear governance, faster delivery, higher productivity and inclusive growth.

2. Introduction

- 2.1 Local Government Reorganisation (LGR) is a key part of the Government's current programme for reform, alongside the expansion of devolved powers through Mayoral Strategic Authorities. Volterra has been commissioned by Oxford City Council (OCC) to analyse the economic benefits of the different options for local government reorganisation. This report assesses the potential impacts of the Greater Oxford (GO) proposal and compares them to alternative options for the future governance of Oxfordshire.

Context

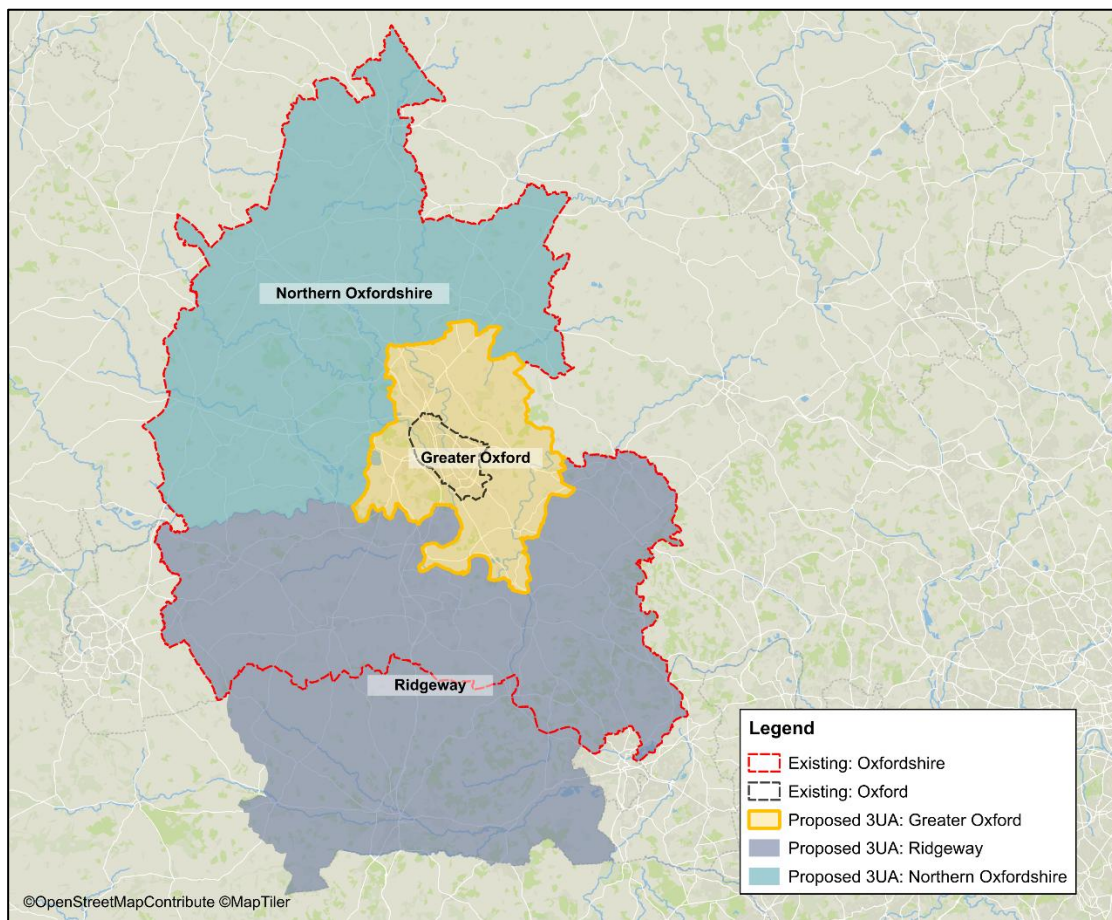
- 2.2 On 16 December 2024, the Government published a white paper, setting out its ambitions for a national programme of devolution and local government reform.¹ The aim is to simplify governance, improve efficiency, and strengthen local leadership by creating larger, more capable unitary authorities. This would replace the remaining two-tier arrangements in areas such as Oxfordshire, where responsibilities are currently split between district and county councils. The reforms are intended to streamline decision-making, enhance accountability, reduce duplication, and deliver better value for money, while supporting economic growth and more responsive public services.
- 2.3 The Government has invited councils in Oxfordshire to submit proposals for LGR by 28 November 2025. It will then decide on the preferred unitary structure for the county, with the new council(s) expected to be formed in 2028, in line with the Government's indicative timeline.

Proposals under consideration

- 2.4 In Oxfordshire, three structural options are under consideration:
1. **Three Unitary Authorities (3UA):** proposed by Oxford City Council (see Figure 1). This would comprise:
 - A *GO Council* – covering Oxford and its surrounding area;
 - A *Northern Oxfordshire Council* – covering the north and west of the county; and
 - A *Ridgeway Council* – covering much of South Oxfordshire, Vale of White Horse, and West Berkshire.
 2. **Two Unitary Authorities (2UA):** proposed by the other four Oxfordshire district councils (Cherwell, Vale of White Horse, South Oxfordshire, and West Oxfordshire) together with West Berkshire Council. This would involve:
 - *Oxford and Shires Council* – covering Cherwell, Oxford City, and West Oxfordshire; and
 - *Ridgeway Council* – covering South Oxfordshire, Vale of White Horse, and West Berkshire.
 3. **One Unitary Authority (1UA):** proposed by Oxfordshire County Council.
 - This would see a single authority covering the current county council area, replacing all five existing district councils (excludes West Berkshire).
- 2.5 **Figure 1** sets out the proposed boundaries for the 3UA proposal.

¹ MHCLG, 2024. [English Devolution White Paper](#)

Figure 1 – 3UA proposal



Purpose of this report

2.6

The purpose of this report is to provide a clear, evidence-based comparison of the three proposals for Local Government Reorganisation in Oxfordshire. It focuses on the potential impacts of the GO proposal, assessing how it is likely to perform relative to the alternative 2UA and 1UA options.

3. Why Greater Oxford?

- 3.1 Boundary change is not an end in itself. The GO proposal matters because it shifts where growth happens. By aligning planning, housing and transport for Oxford's functional economic area, GO enables targeted land release close to the city's core and along public transport corridors. This facilitates a higher rate of jobs growth, raising effective density both through two channels – both more jobs but also the number of jobs accessible to existing clusters within short, reliable travel times. This increased effective density in turn drives productivity, wages and fiscal yield, while supporting inclusive access to jobs and services. Sections 4–6 quantify these channels.

Why cities drive growth

- 3.2 In modern economies, cities account for a disproportionate share of jobs, innovation and output. They concentrate knowledge-intensive activity and act as gateways to global markets, making them central to national productivity and competitiveness.
- 3.3 Cities are powerful drivers of economic growth because they concentrate people, businesses, and institutions in close proximity. This spatial concentration generates agglomeration effects, the productivity advantages that occur when economic activity clusters.² A strong evidence base shows that agglomeration leads to higher productivity, wages, innovation, and resilience, making cities the engines of national growth.³ The section below, '**Why Oxford is globally and economically important**', demonstrates that Oxford is a key driver of the national economy in terms of many of these dimensions.
- 3.4 Agglomeration works through three interrelated channels:⁴



Sharing: Firms benefit from shared infrastructure and services, achieving economies of scale and reducing operational costs.



Learning: Frequent interaction accelerates and enables ideas and innovations to spread rapidly among firms and institutions. In Oxford's case, this is concentrated along the "Knowledge Spine," linking research, science parks, and key employment hubs (see **Figure 3**).⁵



Matching: Dense labour markets make it easier for employers to find the right skills and for workers to find suitable, high-quality jobs. These specialised labour markets attract and retain highly skilled workers essential for innovation-driven sectors.^{6,7}

The evidence on productivity uplift

- 3.5 The empirical literature finds a systematic, city-wide link between density and productivity: when access to jobs improves, average productivity rises across the whole workforce, not just among new arrivals. Effects are strongest in knowledge-intensive services – a sector mix in which Oxford is particularly specialised. Empirical studies demonstrate that:

- A 10% increase in cluster size is associated with a 0.67% increase the number of patents produced by a scientist in a year, reflecting a productivity boost across all inventors in the cluster, not just new arrivals.⁸

² Centre for Cities, 2023. The impact of agglomeration on the economy

³ European Central Bank, 2024. Time-varying agglomeration economies and aggregate wage growth

⁴ Department of Geography and Environment, London School of Economics, 2016. Micro-foundations of urban agglomeration economies

⁵ Small Business Economics. 2025. Hidden champions and knowledge spillovers: innovation-enhancing agglomeration effects and niche technology specificity

⁶ Department for Transport, 2025. [TAG Unit A2.4 Appraisal of Productivity Impacts](#)

⁷ Innovation Caucus. 2022. Understanding Cluster Growth Potential

⁸ National Bureau of Economic Research, 2022. Place-based productivity and costs in science

- A doubling of city size increases productivity by approximately 4.4% on average.⁹
- In knowledge based sectors, the effect is stronger: for example, in business services, productivity can rise up to 8.3% when a city size doubles.¹⁰

- 3.6 The latter two findings relate to aggregate citywide productivity, meaning the gains are measured across the whole workforce in the city (all workers for the 4.4% and knowledge based workers for the 8.3%), not just among additional workers.
- 3.7 Additional employment sites benefit most from agglomeration effects when they are located close to the city's core employment areas or near existing employment clusters. The productivity advantages of agglomeration also depend on both physical and effective distance, meaning that more geographically distant sites can benefit if supported by strong transport connectivity. Therefore, additional edge-of-city employment sites that are adjacent to existing employment hubs or have fast, reliable links to the city's core can greatly capture these benefits.
- 3.8 The diminishing effects of distance on agglomeration are particularly pronounced in service and knowledge sectors, where innovation and growth rely on frequent face-to-face interaction and knowledge spillovers. By contrast, manufacturing is less reliant on such proximity and therefore experiences weaker productivity gains from clustering.¹¹

Why Oxford is globally and economically important

- 3.9 Oxford has a global reputation for high-value, knowledge-intensive activity, underpinned by world-class research institutions and a deep talent pool. Its innovation ecosystem generates spin-outs, scale-ups and globally competitive firms that anchor supply chains across the sub-region.
- 3.10 Oxford City is an economic hub, generating an estimated £8.5 billion GVA per year and supporting over 128,000 jobs across high-tech, research, professional services, and public administration sectors.^{12,13} The city hosts approximately 5,000 businesses and contributes roughly £1.15 billion in income tax annually, reflecting its skilled workforce and high wages.^{14,15}
- 3.11 Its reputation stems from the exceptional reputation of the University of Oxford, regularly ranked among the top five universities worldwide and recognised as one of the world's "super brands" on reputation ranking.¹⁶ The university's vast research income, over £3 billion in FY 2023–24, including nearly £779 million from grants and contracts, underpins an ecosystem of world-leading talent, innovation, and intellectual capital.
- 3.12 The university has produced more than 205 spin-outs since 2011, around 16% of the UK total, with firms such as Oxford Nanopore and Immunocore exemplifying its world-leading cluster.¹⁷ Oxford-based spinouts frequently make international headlines: an article on OrganOx, for example, was recently in the Financial Times for achieving a record-breaking \$1.5 billion acquisition, showcasing the city's strength in translating university-based research into global commercial success.¹⁸
- 3.13 This dynamic economic environment is further elevated by Oxford's sustained appeal to international investors. Oxford consistently ranks among the UK's top cities for foreign direct investment, ranked sixth nationally for inward FDI (behind just Inner London, London, Outer London, City of Edinburgh and Greater

⁹ Centre for Cities, 2023. The impact of agglomeration on the economy

¹⁰ Centre for Cities, 2023. The impact of agglomeration on the economy

¹¹ DfT, 2025. TAG Unit A2.4 Appraisal of Productivity Impacts

¹² ONS, 2023. Table 3: Regional gross value added (balanced) by industry: local authorities by ITL1 region

¹³ BRES, 2023. Oxford Employment

¹⁴ OCC, 2025. Economic statistics

¹⁵ OCC, 2018. Oxford Economic Profile

¹⁶ Times Higher Education World University Rankings

¹⁷ Advent Research, 2025. [Life Sciences in Oxfordshire: Spin-Offs, Innovation and Investment](#)

¹⁸ Financial Times, 2025. Oxford university spinout OrganOx sold to Japanese group Terumo for \$1.5bn

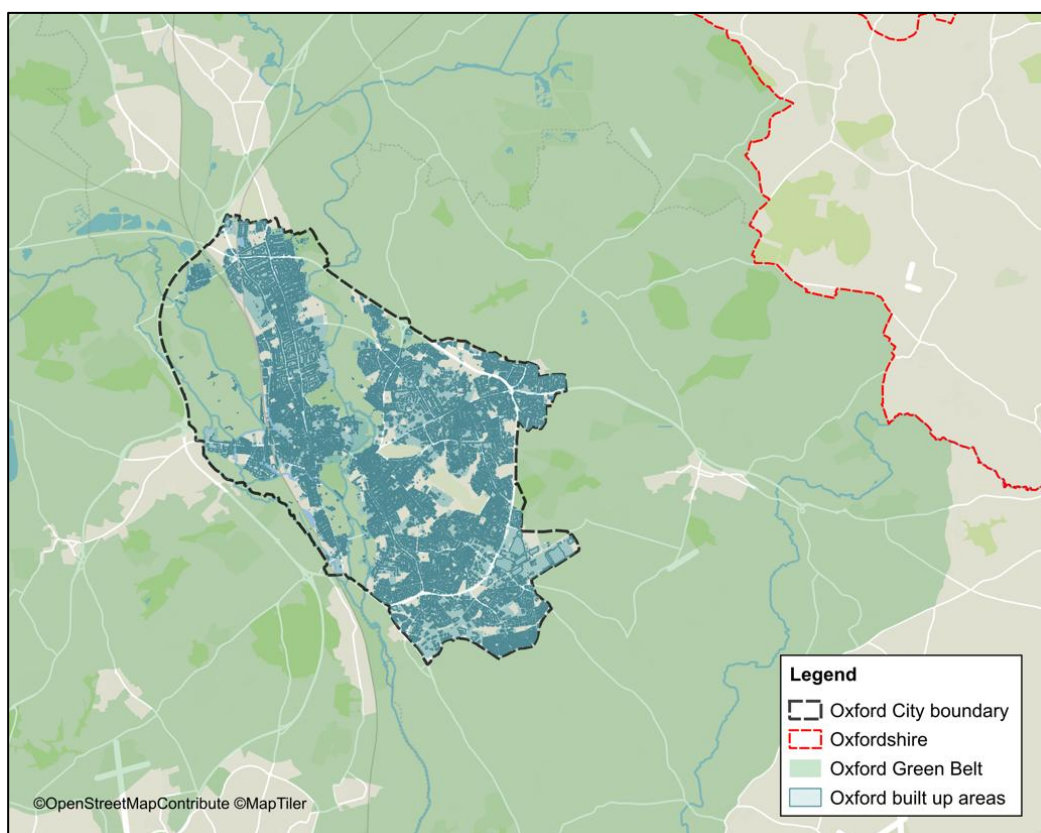
Manchester).¹⁹ Recent high-profile commitments illustrate this momentum: in September 2025, Larry Ellison confirmed a £118 million AI-vaccine research grant and a £1 billion-plus campus investment, while GSK committed £50 million to a new cancer prevention research programme, both underscoring investor confidence in Oxford's capabilities and ambition.²⁰

- 3.14 As set out above, Oxford's economy is dominated by high-tech, research and development, and higher education industries particularly sensitive to the benefits of agglomeration. These sectors gain disproportionately from clustering and density, giving Oxford a greater potential uplift from agglomeration than other parts of Oxfordshire with less knowledge-intensive specialisms.

Oxford's constraints are holding it back

- 3.15 Oxford's economy is already globally significant, but growth is constrained by administrative boundaries and limited land supply near the core.
- 3.16 The tightly drawn boundary and surrounding Green Belt severely limit capacity for new jobs, homes and infrastructure in the most accessible locations. As a result, demand is displaced to less connected sites in neighbouring districts, diluting agglomeration benefits.
- 3.17 **Figure 2** shows the built-up extent of Oxford and the Green Belt. Most non-Green Belt land within the boundary is already developed; remaining green spaces are protected for recreation, amenity and ecology through Local Plan policy. This leaves very limited scope for growth at the city's heart under the status quo.²¹

Figure 2 – Built up areas within Oxford City and Green Belt overlay



¹⁹ Thames Valley Chamber of Commerce, 2024. Oxford Maintains Top 10 Position For Most Attractive Location for FDI

²⁰ University of Oxford, 2025. Oxford launches major new AI vaccine research programme with the Ellison Institute of Technology

²¹ Oxford City Council, 2019. Oxford Local Plan 2036 - Adoption of the Plan

- 3.18 Oxford's growth sectors in particular, are constrained by land supply. In the first half of 2025, Bidwells reports that office prime rents have reached a new high (£63 psf) and occupiers show a clear preference for high-quality Grade A space to attract and retain staff. However, a lack of development has created a sharp shortfall with availability falling to just 119,600 sq ft in mid-2025, the lowest level in seven years.²²
- 3.19 In terms of labs, Bidwells reports demand for larger labs from multi-national pharma companies and research institutes increased, in part because Oxford now has a ready supply of Grade A space for the first time since the pandemic.²³ This indicates a that a temporary increase in availability has resulted in this increase in demand.
- 3.20 Similar pressures are evident in housing. The NPPF sets out statutory Standard Method (SM) housing targets for local authorities based on their existing stock and the affordability of housing within the local authority.²⁴ The Standard Method (SM) determines a need of 1,080 dwellings per annum in Oxford City, however, only 432 homes were added per year on average in Oxford between 2021 and 2024, which is significantly less than the new target demonstrating a realistic capacity of less than half of identified need. This is explicit recognition of Oxford's constrained boundary.²⁵
- 3.21 Policy history further underlines this point. Between 2016 and 2018, under the Duty to Cooperate, the Oxfordshire Growth Board agreed to redistribute around 15,000 homes of Oxford's unmet need to neighbouring districts. This figure was embedded in the 2016 Strategic Housing Market Assessment (SHMA) and subsequently carried through into the Local Plans for Cherwell, Vale of White Horse, South Oxfordshire, and West Oxfordshire.^{26,27,28} It was acknowledged in the Partial Review of the Cherwell Local Plan, that there is a pressing need to provide homes to meet the needs of Oxford that cannot be met within the boundaries of the city.²⁹
- 3.22 These housing constraints exacerbate a well-documented jobs to housing imbalance. ONS data show Oxford has around 1.2 jobs per working-age resident, compared to 0.7–0.9 in the four surrounding Oxfordshire districts.³⁰ This imbalance generates significant in-commuting pressure.
- 3.23 The combined effect is a mismatch between economic demand and land supply. It limits business growth, exacerbates affordability pressures, and creates planning tensions with surrounding authorities.

Oxford is where businesses want to locate

- 3.24 High-value firms have consistent locational patterns – they need proximity to Oxford's research base but also space to grow, which only edge-of-city sites can provide.
- 3.25 While requirements vary by firm, global and high-growth companies in life sciences, advanced manufacturing and deep tech show consistent patterns in their locational needs.

3.26 **Core locational preferences include:**

- **Substantial plots of land with space to grow:** Labs and R&D buildings are lower-density and “space-hungry,” so occupiers look for sites that can take larger floorplates, specialist servicing and phased expansion; evidence consistently finds edge-of-urban locations offer the greatest scale and flexibility for these uses.³¹

²² Bidwells, 2025. Oxford Offices and Labs report

²³ Bidwells, 2025. Offices & Labs Databook Oxford - August 2025

²⁴ Ministry of Housing, Communities, and Local Government (MHCLG), 2024. National Planning Policy Framework

²⁵ BBC tracker, 2025. Some councils ordered to increase home building by 400%, new BBC tracker shows

²⁶ Oxfordshire County Council, 2016. Working together on county's housing needs

²⁷ South Oxfordshire District Council, 2016. Authority Monitoring Report

²⁸ Cherwell District Council, 2016. Cherwell Local Plan 2011 – 2031(Part 1) Partial Review - Oxford's Unmet Housing Need

²⁹ Cherwell District Council, 2020. Cherwell Local Plan 2011 – 2031 Partial Review - Oxford's Unmet Housing Need

³⁰ ONS, 2023. Job density per district

³¹ Icen, 2024. Greater Cambridge Growth Sectors Study: Life science and ICT locational, land and accommodation needs

- **Proximity to world-class research institutions:** High-growth firms benefit from close links to universities, hospitals and anchor companies to accelerate collaboration, tech transfer and recruitment. Innovation-district research sets out the importance co-location with anchor institutions; sector studies also note many smaller firms prefer to be located with institutions or research centres.³²
- **Access to skilled talent:** Deep pools of specialised labour, and pipelines from higher education, are central. Policy and market evidence repeatedly place talent at the heart of cluster competitiveness and site choice for deep-tech sectors.³³
- **Amenities that support productivity and retention:** The preferred model is an integrated, place-based campus that bundles quality premises with everyday amenities (cafés, gyms, green space) and spaces for interaction and collaboration.³⁴
- **High-quality infrastructure and utilities:** Modern labs typically require robust power, HVAC/clean-air systems and security, needs that are easier to deliver at campus scale; life-science buildings demand more specialised infrastructure than standard offices.³⁵
- **Excellent public transport connectivity:** Firms value rapid, reliable public transport and wider network access; innovation-district guidance highlights public transport-accessibility as a defining feature, and sector studies list sustainable/public transport links among key locational priorities.³⁶
- **Critical mass and community:** Successful locations cultivate a concentrated labour pool, peer networks and shared facilities that enable spillovers and collaboration, especially important for start-ups and scale-ups.³⁷

- 3.27 As city-centre space becomes more constrained, high value firms are increasingly opting for edge-of-city locations that provide the scale, flexibility and connectivity they require. For example, Cambridge's planning evidence (a close comparator market to Oxford) sets out that life science and tech occupiers "have historically been located on edge-of-centre campuses and out-of-town science parks," with edge-of-urban sites preferred for space and flexibility; urban centres remain popular but are "inherently space-limited."³⁸
- 3.28 The market is also shifting towards integrated, public transport-served campuses that combine fitted labs, grow-on space and everyday amenities. Around Oxford, this is evident in the growing number of nearby science and business parks (the location of these science and business parks are set out in **Figure 3**).^{39,40,41}
- 3.29 Oxford offers an unusually complete innovation ecosystem of research excellence, deep talent, specialist real estate, and global firms, an environment that other UK regions cannot match. This is evidenced by businesses comparing Oxford with global clusters like Boston or Silicon Valley, rather than with other UK cities.⁴²
- 3.30 This preference from high value firms to be located around Oxford is visible in firm behaviour: many leading companies have already chosen locations just outside the current city boundary (but within GO) to stay close to the research base and workforce while securing space and specification. The table below sets out three examples.

³² Brookings, 2014. The Rise of Innovation Districts: A New Geography of Innovation in America

³³ GOV.UK, 2025. UK Quantum Skills Taskforce report

³⁴ Icen, 2024. Greater Cambridge Growth Sectors Study: Life science and ICT locational, land and accommodation needs

³⁵ Savills, 2024. Life Science: Trends & Outlook

³⁶ Icen, 2024. Greater Cambridge Growth Sectors Study: Life science and ICT locational, land and accommodation needs

³⁷ Brookings, 2014. The Rise of Innovation Districts: A New Geography of Innovation in America

³⁸ Icen, 2024. Greater Cambridge Growth Sectors Study: Life science and ICT locational, land and accommodation needs

³⁹ Oxford Calling, 2025. Science and business parks

⁴⁰ Knight Frank. UK Life Sciences and Innovation: Labs Explained

⁴¹ CBRE, 2025. Global Life Sciences Atlas

⁴² Lambert Smith Hampton, 2020. Oxbridge Area in Focus – The Knowledge Corridor

Table 1 – Companies that have established themselves within the GO boundary and either just inside (in the case of Nanopore) or outside of Oxford City



Fusion energy company Tokamak Energy, a spin-out from the UK Atomic Energy Authority at Culham, Oxfordshire, has remained anchored locally, constructing its next-generation ST80-HTS prototype reactor on the Culham Campus.⁴³

“Constructing the facility at Culham provides access to leading science and engineering capabilities, including [UKAEA’s] knowledge and experience in designing and operating the record-breaking JET tokamak.”
— Tokamak Energy



Oxford Nanopore is one of the UK’s most successful deep-tech firms, developing world-leading DNA and RNA sequencing technology now used in more than 120 countries. The company is headquartered at the Oxford Science Park, a location chosen for its proximity to the University of Oxford and the city’s globally recognised life sciences cluster. Being based just four miles from the university gives Oxford Nanopore unrivalled access to cutting-edge academic research, highly skilled graduates, and a dense ecosystem of biotech and med-tech firms.⁴⁴

This combination of connectivity, talent, and infrastructure has helped Oxford Nanopore grow from a university spin-out into a FTSE-listed firm with a global footprint, while retaining deep roots in Oxford’s innovation ecosystem.



Adaptix Ltd is a pioneering medical imaging company developing next-generation 3D X-ray technology that promises to transform diagnostic practice. Its portable imaging systems aim to deliver high-quality scans at the point of care, reducing the need for large, fixed equipment and improving accessibility for patients.

Founded in 2014 and initially based at Harwell, Adaptix relocated to Begbroke Science Park to support its expansion to over 50 staff, including more than a dozen PhD-level researchers. The move provides the company with a unique competitive advantage: proximity to the University of Oxford, giving direct access to world-class expertise in materials science, engineering, and medical research, as well as specialist laboratory and prototyping facilities. Begbroke’s tailored innovation ecosystem, combined with practical services such as its dedicated shuttle link to Oxford, has enabled Adaptix to scale significantly while remaining embedded within the region’s globally recognised life sciences cluster.

3.39

For many sectors, Oxford is uniquely complete in the UK for vaccines and immunology and nationally distinctive in genomics, quantum computing, fusion energy. For example, it is home to the country’s only fully integrated vaccine and immunology cluster, uniting world-leading institutions such as the University of Oxford, the Jenner Institute, the Oxford Vaccine Group, and the Clinical Biomanufacturing Facility. Together they provide a complete, end-to-end pipeline spanning discovery, development, clinical trials, and manufacturing. No other UK location offers this complete concentration of expertise and infrastructure.⁴⁵ This unique ecosystem enabled Oxford to deliver the world’s first COVID-19 vaccine trial within just four months of the virus being identified.⁴⁶ Other key sectors with clusters in and around Oxford include genomics, quantum computing, fusion energy and AI-enabled diagnostics.^{47,48}

⁴³ Culham Campus, 2023. Tokamak Energy’s new advanced fusion prototype to be built at UKAEA’s Culham Campus

⁴⁴ Oxford Nanopore Technologies, 2025. To enable the analysis of anything, by anyone, anywhere

⁴⁵ Clinical BioManufacturing Facility, 2025. Manufacturing a Covid-19 Vaccine

⁴⁶ UK Research and Innovation, 2025. The story behind the Oxford-AstraZeneca COVID-19 vaccine success

⁴⁷ Oxford Technology Park, 2025. IonQ announces agreement to acquire Oxford Ionics, accelerating path to pioneering breakthroughs in Quantum Computing.

⁴⁸ University of Oxford, 2018. Oxford secures £17.5 million to lead national AI healthcare programmes





- 3.40 The edge of the city is where Oxford can most effectively provide both proximity (to universities, hospitals, major employers and talent) and capacity (larger plots, lower-density lab formats, and future expansion). Market behaviour and pipelines at the edge of the city show high unmet demand demonstrating that additional, public transport-connected edge-of-city sites are the most effective way to capture additional high value investment.
- 3.41 In addition to edge of the city sites, there are other locations within Oxfordshire where firms may choose to establish themselves, driven by specific factors such as access to established business parks and employment hubs like Harwell (and others outlined in Figure 3). However, the locational preferences outlined above largely reflect the priorities of many high-tech, global firms, for whom proximity to the city centre and strong transport links are essential.
- 3.42 As such, while different firms and industries have varying locational requirements, there is a clear and pressing demand for edge of the city locations. Without the provision of such spaces, there is a risk that many firms could look to locate elsewhere in the world, rather than moving to other parts of Oxfordshire, where they may not be able to fulfil their specific needs.

The case for Greater Oxford

- 3.43 Oxford's global reputation, innovation ecosystem and firm demand point to huge potential for growth. Yet the city's tightly drawn boundary and surrounding Green Belt leave little space for new jobs or homes. This mismatch between demand and supply pushes activity into less connected locations, weakens agglomeration benefits, and risks deterring investment.
- 3.44 Expanding the boundary through a GO authority would directly address this constraint. It would unlock land in the right places – near employment clusters and supported by public transport – allowing firms to expand close to the knowledge core while residents gain access to affordable homes and jobs. In doing so, GO aligns business needs with Oxford's functional economic geography and creates the conditions for sustained, inclusive growth.
- 3.45 Expanding the boundary of Oxford through GO would meet the requirements of businesses set out above. It would create economic centres adjacent to the city, served by public transport infrastructure which reduces the likelihood people would need to commute by car, increases the space utilised for development rather than car parking, and limits the growth in road traffic. The anticipated Cowley Branch Line reopening for passenger services is a further driver of connection and growth between housing, skills and business location. The proximity for knowledge exchange, supply chains and supporting services creates an innovation ecosystem that can accelerate inclusive economic growth.
- 3.46 A GO unitary would also simplify governance. At present, development on the city's edge requires navigating multiple councils, causing delay and uncertainty. Consolidating planning, housing and transport in a single authority would provide clarity for investors and enable more strategic, joined-up decisions about where and how Oxford grows.
- 3.47 Expanding Oxford's boundary would also unlock space for growth within the high-productivity zone, enabling:
- Concentration of growth around existing employment hubs;
 - Denser, more efficient patterns of activity, reducing travel distances and infrastructure costs; and
 - Formation of new clusters, reinforcing Oxford's global competitiveness.

3.48

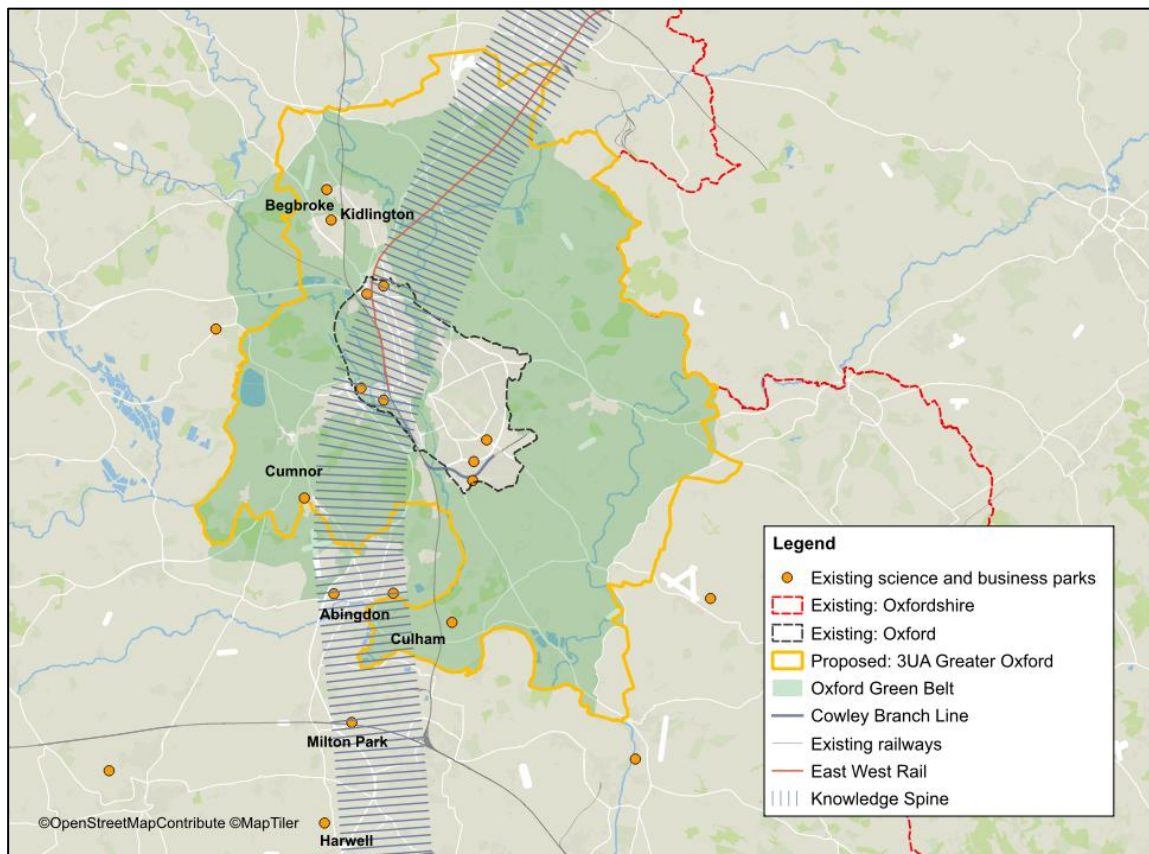
A GO authority would also bring wider strategic benefits. It will:

	Allow integrated planning of housing, employment, and infrastructure at the right spatial scale, ensuring that growth is coordinated rather than fragmented across multiple districts.
	Enable the strategic release of Green Belt land. Even with provision for around 40,000 new homes, the vast majority of Oxford's 135 square miles of Green Belt would remain untouched. Key ecological assets such as Shotover and Otmoor would continue to be safeguarded under statutory protection. ⁴⁹
	Incorporate Oxford and its surrounding communities into a coherent economic geography, recognising functional ties through commuting, research networks, and leisure. This is covered in more detail in the 'A coherent economic geography' section below.
	Better ensure Oxford's priorities are both represented and delivered. It would provide a powerful voice at the Mayoral Strategic Authority table, while also providing the local capacity to align housing, skills, and economic development with major infrastructure investments such as East–West Rail. This combination of influence and delivery would help Oxford translate its global strengths into sustained, inclusive growth.

3.49

The map below sets out current science and business parks, and the Oxford Green Belt boundary. This highlights the potential for strategically located, high impact developments near existing key employment site on the outskirts of Oxford City's current boundary.

Figure 3 – Proposed GO boundary with identified sites, Oxford Green Belt, exiting and proposed railways and the Oxfordshire knowledge spine



⁴⁹ Natural England, 2025. Designated Sites View

What Greater Oxford unlocks

- 3.50 By uniting Oxford's functional economic area into a single authority, GO would:
- Release significant additional commercial, office and R&D space, with many likely to be located near key employment sites to maximise agglomeration opportunities
 - Accelerate housing delivery, including affordable and social homes, easing pressures on recruitment and retention in key sectors.
 - Generate new (not displaced) growth by capturing investment that would otherwise go to competing UK or international clusters.
- 3.51 The scale of the opportunity is clear. A report produced by the Oxford-Cambridge Supercluster Board in 2024 highlighted that unlocking potential growth across Oxford the region could make it the 'crown jewel' of European science and innovation and could benefit the UK by as much as £50 billion per year by 2030.⁵⁰
- 3.52 GO would also help to tackle Oxford's affordability crisis. Oxford faces one of the most severe housing affordability challenges in the UK, with average house prices more than eleven times average earnings.⁵¹ Under-supply undermines the ability of employers to retain staff, particularly in the NHS and key sectors such as academia and tech.⁵² The University of Oxford has recognised the challenge, proposing 2,000 homes for postdoctoral researchers to ease rent pressures.⁵³
- 3.53 The growth potential of the 3UA options including GO and the alternative LGR options is considered in a later section of this report.

⁵⁰ Oxford-Cambridge Supercluster Board, 2024

⁵¹ ONS, 2025. Housing affordability in England and Wales: 2024

⁵² Oxfordshire Country Council, 2024. Agenda item: Oxford University Hospitals NHSFT People Plan

⁵³ Oxford City Council, 2017. University Housing Needs

4. A coherent economic geography

Framing Oxford's economic geography

- 4.1 A Functional Economic Market Area (FEMA) describes the real geography of daily life. This area illustrates where people live, work, shop, and access services. These areas rarely align with administrative boundaries.
- 4.2 Defining a FEMA is not an exact science. Rather than fix a single line, we identify a 'best-fit' area using a small set of complementary indicators at fine spatial scales (e.g. commuting flows, journey times, service and housing market linkages).⁵⁴
- 4.3 Volterra's methodology draws on multiple datasets to capture the most important economic linkages, enabling us to describe Oxford's functional geography. For this study, indicators are mapped to demonstrate that the city's economic and social reach extends beyond the current administrative boundary. The resulting evidence shows that the proposed GO boundary would be a better fit with the true scale of the city's economy and service catchments. Taken together, they point to a GO that better matches the city's true economic and service catchments than existing arrangements.

Identifying Oxford City's coherent economic geography

30-minute drive time

- 4.4 A 30-minute contour mirrors typical UK commuting behaviour and is widely used in accessibility analysis. The DfT reports an average commuting time of around 29 minutes in Great Britain, therefore mapping a 30-minute drive time captures the 'everyday sphere' of most workers and aligns with DfT Journey Time Statistics for assessing access to employment.⁵⁵

45-minute cycle

- 4.5 Oxford has unusually high active travel commuting (17.2% cycling in Oxford compared to 6.7% across Oxfordshire and 3.1% nationally), so a broader cycling catchment is appropriate.⁵⁶ This is consistent with Kicak Cycling and Walking Infrastructure technical guidance to plan strategic, longer corridors between key origins and destinations.⁵⁷ This window fairly represents realistic upper-bound commute cycles in a cycling city like Oxford.

50 + commuters to Oxford City

- 4.6 Census data on where people travel for work helps us see which areas have a real daily connection to Oxford. By focusing on places that send at least 50 workers into the city, we cut out very small, irregular flows and highlight those with a genuine link.⁵⁸ Given the size of a typical local area (5,000–15,000 residents), this threshold usually means at least 1% of the workforce is tied to Oxford.⁵⁹ ⁶⁰ This provides a clear, evidence-based way of showing the city's wider pull on surrounding communities.

⁵⁴ Ministry of Housing, Communities and Local Government, 2024. Planning practice guidance: Plan-making

⁵⁵ DfT, 2024. Transport Statistics Great Britain: 2023 Domestic Travel

⁵⁶ OCC, 2022. Travel to work in Oxford Census 2021

⁵⁷ DfT, 2017. Planning local cycling and walking networks

⁵⁸ ONS, 2023. Origin-destination data explorer: Census 2021

⁵⁹ UK Data Service, 2021. An introduction to 2021 Census geography datasets

⁶⁰ NB: Middle layer super output areas usually comprise between 5,000 to 15,000 residents.

100+ commuters to Oxford City

- 4.7 Looking at places with at least 100 commuters gives us a way to identify the strongest links to Oxford City typically 2% to 3% of a local area's workforce.⁶¹ This higher threshold makes it possible to distinguish between areas with moderate connections and those with especially strong commuting ties. By mapping these flows, we can clearly show the corridors where Oxford's influence is most concentrated, reinforcing the case for recognising a wider 'Greater Oxford' economic area.

Grouping of key Oxford business parks

- 4.8 Oxford's major business and science parks form the backbone of its high-value economy, but they do not all play the same role. Parks such as Milton Park and Culham to the south are heavily integrated into the Science Vale Cluster, an area that has been deliberately planned and branded as a complementary hub of science and technology activity, sitting just beyond Oxford's boundary but linked closely through supply chains and commuting flows. By contrast, parks like Begbroke to the north of Oxford (just outside the city boundary) are more directly connected to the city's own research base and institutions, particularly the University of Oxford.⁶² Mapping these parks together demonstrates the breadth of Oxford's innovation ecosystem, while also showing how parts of it, particularly to the south, extend into a distinct but connected science value cluster.

Density heatmap of commercial office properties

- 4.9 Clusters are commonly understood as concentrations of related firms and institutions within a defined geography.⁶³ Such concentrations shape competitiveness by raising the productivity of firms, supporting innovation, and encouraging the creation of new businesses. Patterns of clustering can be observed through the density and distribution of commercial premises.

Synthesising Oxford City's coherent economic geography

- 4.10 The overlay of commuting flows, travel times, and the distribution of major employment nodes provides a powerful visualisation of Oxford's wider economic footprint. Taken together, these map layers reveal a distinct concentration of activity within the proposed GO area. The density of commuting patterns, employment hubs, and innovation clusters clearly demonstrates how economic networks extend across current administrative boundaries, underlining the argument that governance and planning should reflect this functional geography rather than the more limited city boundary.

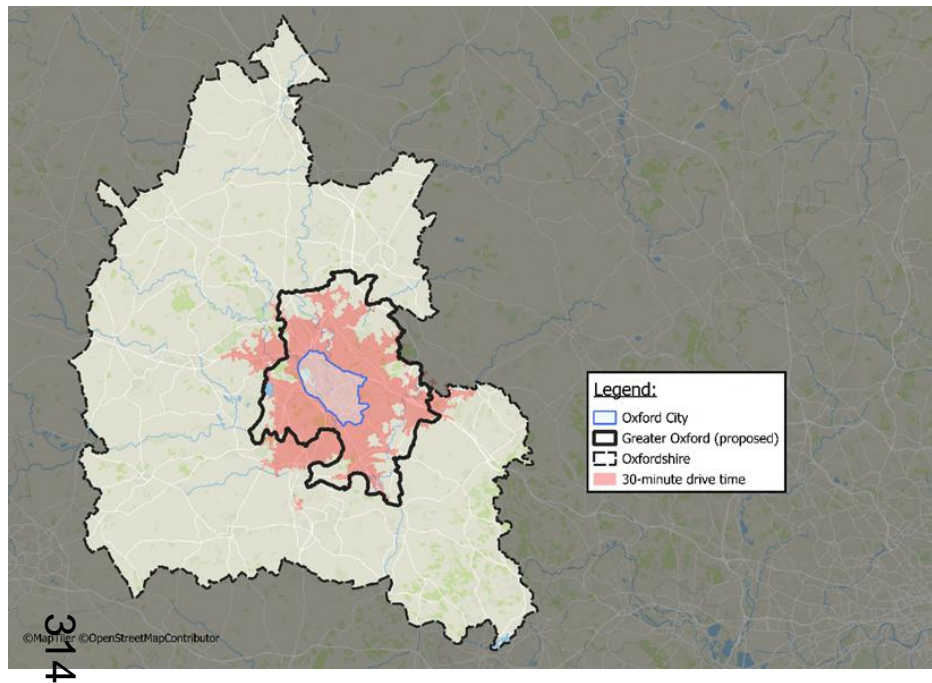
⁶¹ UK Data Service, 2021. An introduction to 2021 Census geography datasets

⁶² OxLEP. No date. The Oxfordshire Innovation Ecosystem

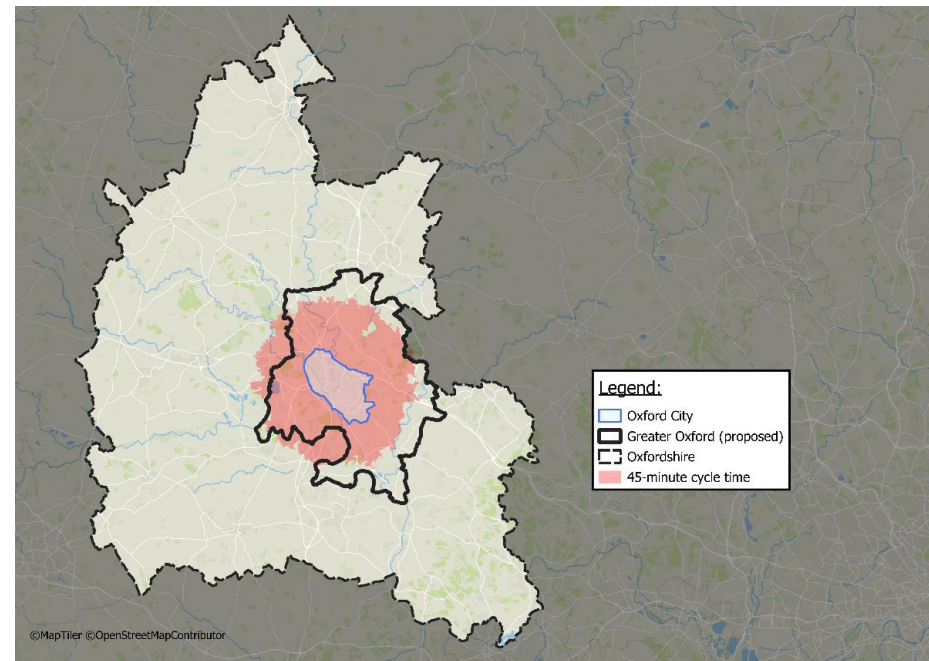
⁶³ Porter, 1998. Clusters and the new economics of competition

Oxford's coherent economic geography – all maps

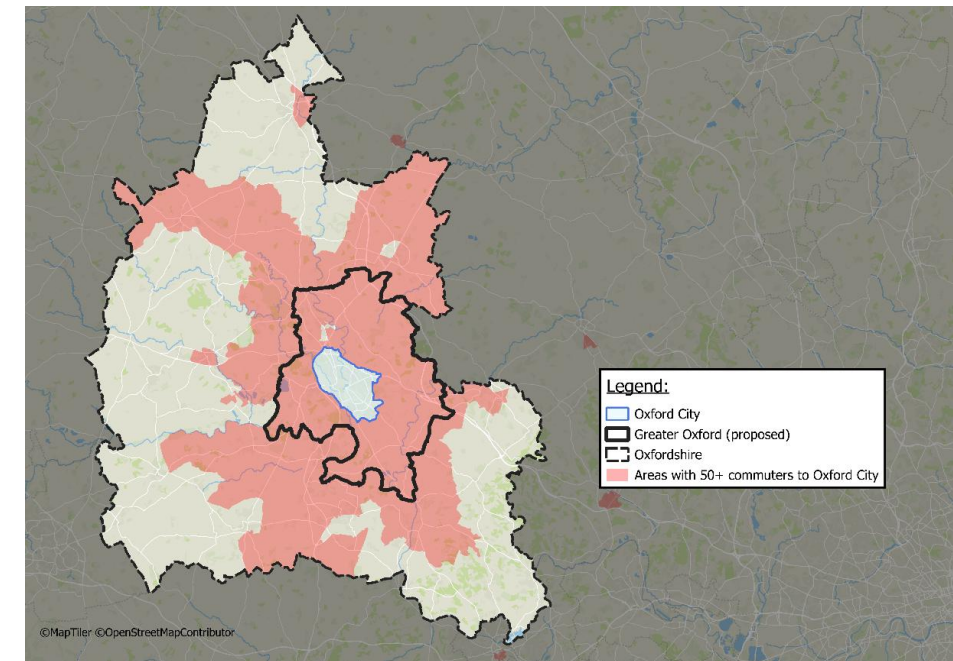
30-minute drive time radius from Oxford City



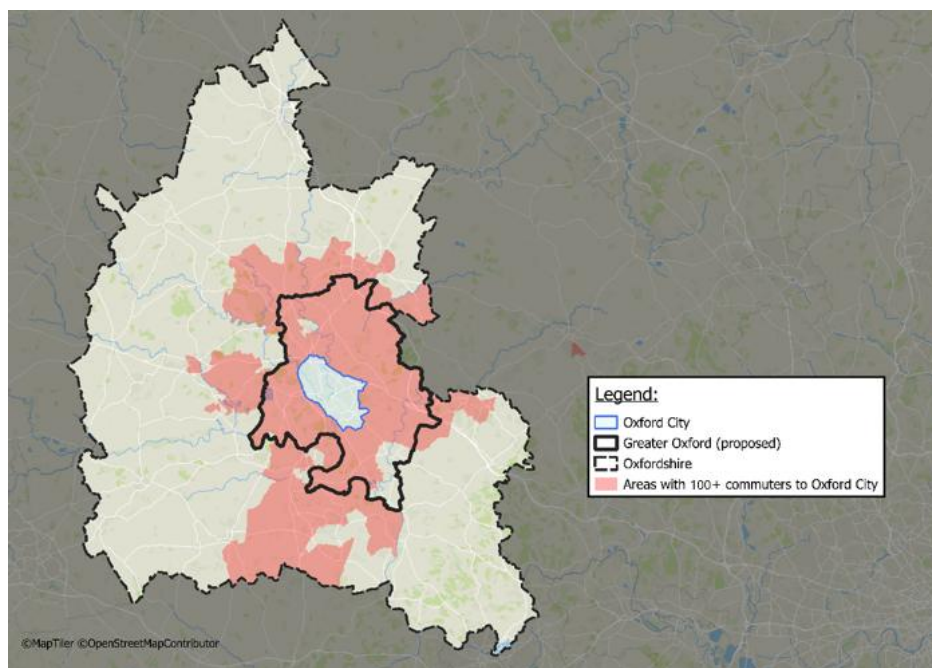
45-minute cycle time radius from Oxford City



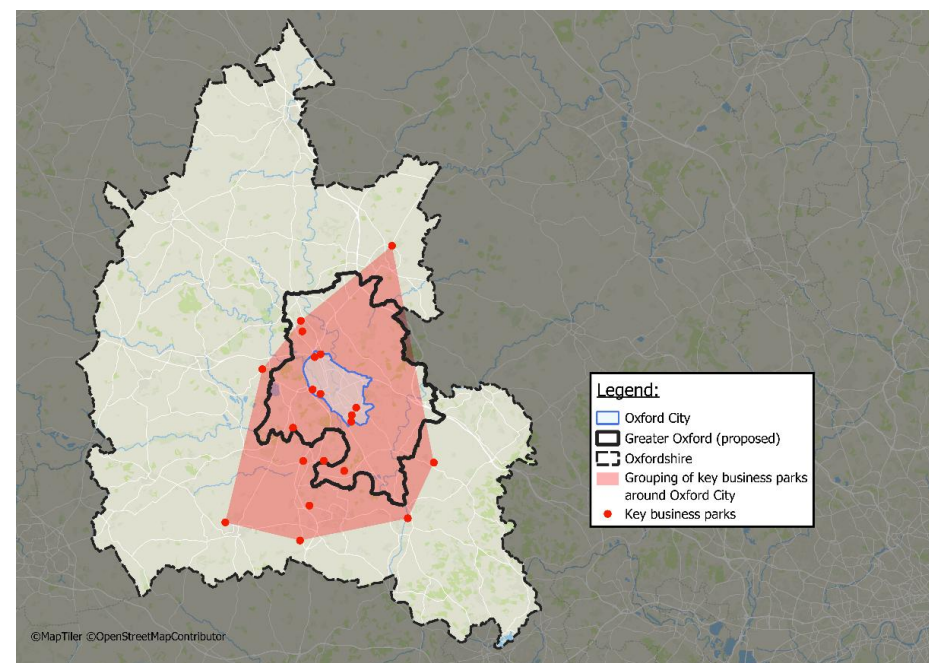
Areas with 50+ commuters to Oxford City



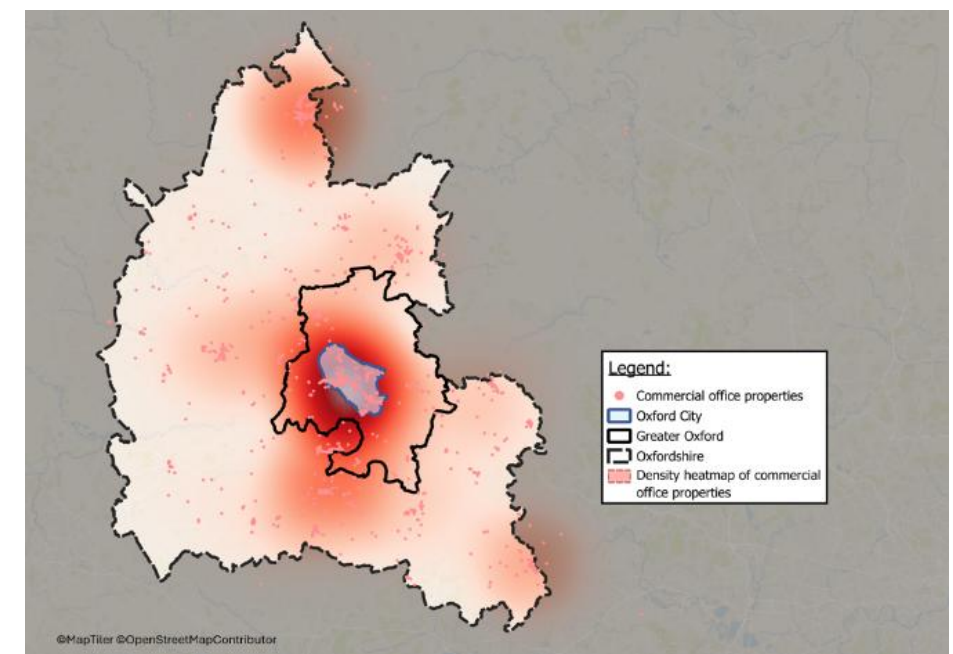
Areas with 100+ commuters to Oxford City



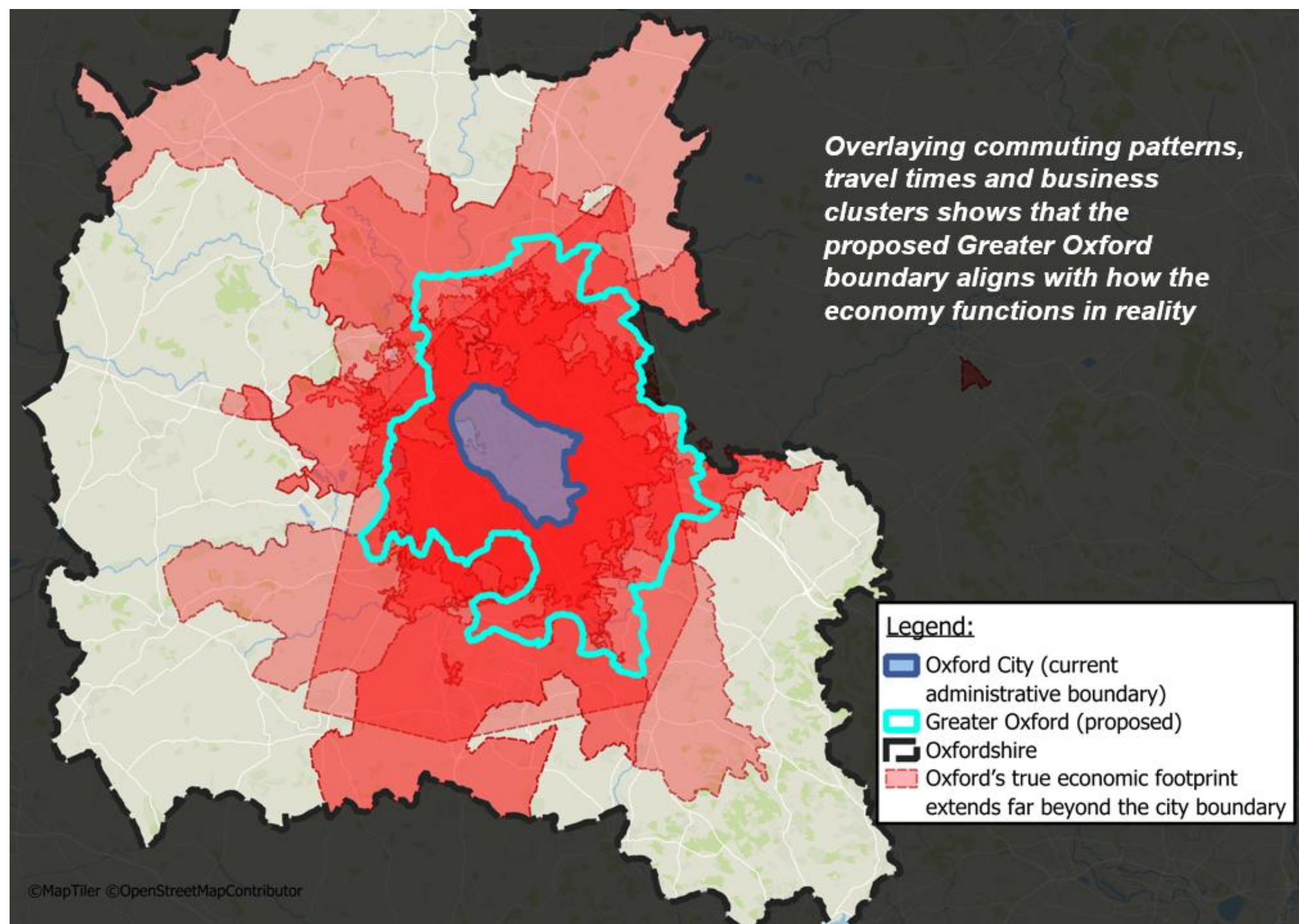
Grouping of key business parks in and outside Oxford City



Density heatmap of commercial office properties



Commuting, travel times and business clusters show that Greater Oxford aligns with how the economy actually works



5. Employment growth potential under different options

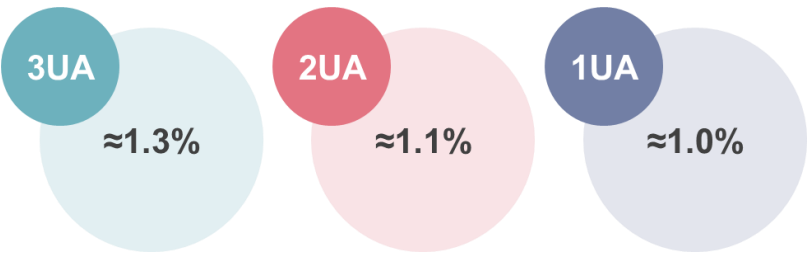
- 5.1

This section considers the employment growth potential of each LGR option. Forecast growth rates are informed by a wide range of evidence, including historic economic performance, growth forecasts from other studies under comparable scenarios, and bottom-up analysis of development potential. Qualitative judgement has also been applied where appropriate to reflect factors likely to change as a result of boundary adjustments, such as shifts in strategic focus, governance priorities, the ability to unlock key development sites and the likelihood of green belt release. The key rationales for each growth rate are transparently presented in this section.
- 5.2

This section sets out likely employment growth rates for each proposal, including the evidence and justification underpinning them. It then outlines the potential associated housing need, including the methodology used and resulting alignment with the SM housing targets for each area and other relevant targets (the Interim Plan Update to MHCLG and the Oxfordshire Housing & Growth Deal).
- 5.3

Figure 4 shows a summary of each proposal's employment growth forecasts.

Figure 4 – Summary of forecast annual employment growth rates under the three options



Employment growth forecasts

3UA

- 5.4

The 3UA model delivers the highest county-wide average employment growth at around **1.3% per year**. Each authority focuses on its distinct economic strengths: GO achieves ≈1.5% by unlocking R&D capacity through selective green belt release and strategic sites such as Culham, maximising agglomeration benefits; Northern Oxfordshire reaches 1.3% through mid-tech, tourism, and agricultural opportunities; and Ridgeway achieves 1.2% via coordinated expansion of Harwell, Milton and Didcot. **Table 2** summarises the evidence and justifications for these forecasts.

Table 2 – 3UA employment growth forecast

1. Greater Oxford	≈ 1.5%
<p>Evidence for growth rate:</p> <ul style="list-style-type: none"> • Employment forecasts under current constraints indicate growth of around 0.6%–1.2% per year, showing the baseline trajectory if Oxford's capacity challenges remain.^{64,65,66} • Historic employment growth performance demonstrates Oxford's ability to deliver much stronger growth: average annual growth of ~1.3% between 2009 and 2019, with peaks of up to 4.7% during 2013–2016 when favourable conditions aligned.⁶⁷ • Bottom-up analysis of identified sites from previous 5th Studio work indicates that ~1.1%–1.3% is achievable.⁶⁸ • There is further upside potential if the Ox-Cam super-cluster investments materialise, which could support growth of 2.3% compound annual growth rate (CAGR), as set out as the transformational scenario in the Public First study. However, this has been excluded from the central case to keep the ~1.5% forecast realistic and evidence-based.^{69,70} <p>Justification:</p> <ul style="list-style-type: none"> • <i>Strategic Green Belt release:</i> <ul style="list-style-type: none"> • Oxford's green belt covers almost 135 square miles, providing substantial scope for carefully managed development without undermining its primary function. While it is estimated that the Green Belt could theoretically accommodate up to 3 million homes, the delivery of around 40,000 new homes would affect only a very small proportion of this land.⁷¹ The vast majority of the Green Belt would remain intact, and key ecological assets such as Shotover and Otmoor, both protected through statutory environmental designations, would continue to be safeguarded.⁷² • Previous analysis (work undertaken by 5th Studio) identified a number of strategically located sites immediately outside the city boundary which are well suited for Green Belt release. These sites are capable of accommodating large development plots that cannot be delivered within Oxford's historic urban form. • Green Belt release in these locations would therefore enable the delivery of major new employment sites of a scale and type likely not achievable under the alternative 1UA or 2UA scenarios, doing so in a way that balances both housing growth and environmental protection. This would represent a step-change in Oxford's growth trajectory, creating the space required to attract and retain globally competitive firms and reinforcing Oxford's position as an internationally significant economic hub. • <i>Agglomeration and clustering benefits:</i> As set out in the Why Greater Oxford? section above, new sites allow firms to cluster more closely, intensifying spillovers, collaboration, and 	

⁶⁴ Oxfordshire Growth Board, 2021. Oxfordshire Growth Needs Assessment

⁶⁵ Oxford City Council, 2022. Oxford City Employment Land Needs Assessment

⁶⁶ Cherwell District and Oxford City Councils, 2022. Housing and Economic Needs Assessment

⁶⁷ Business Register and Employment Survey (BRES), 2024. Historic employment estimates

⁶⁸ The levels of economic growth associated with the 'additional growth' identified sites is calculated using the following assumptions:

- For each site, 50% of the land is developable and 50% of that land is likely to come forward as development.
- These sites are delivered with a ratio of 1.07 jobs per home (the implied rate from the "transformational scenario" in the OGNA).
- The developable land is developed on a basis of 80 dwellings per hectare and 241 jobs per hectare.
- Final growth for the area is calculated based on existing growth + additional growth + growth due to the Cowley Branch Line (8,000 jobs).

⁶⁹ Public First, 2024. [Oxford - Cambridge Scenario Modelling](#)

⁷⁰ Because the additional 450,000 jobs are projected across the entire OxCam Arc, we have estimated Oxford City's share by calculating its proportion of total employment across the relevant local authorities (Milton Keynes, Oxford, Vale of White Horse, Cambridge, and South Cambridgeshire)

⁷¹ Oxford City Council, 2025. Greater Oxford: One council. Local decisions. A better place to live.

⁷² Natural England, 2025. Designated Sites View

innovation. Instead of growth being dispersed, it would be concentrated around existing high-value employment centres, creating productivity uplift.⁷³

- *Occupier preferences:* As set out above, high-tech and research firms strongly prefer locations near Oxford's academic and talent base. They favour edge-of-Oxford campus sites with space and access to skilled labour.
- *Unlocking constrained potential:* Oxford's spinouts and high-growth firms are currently struggling to scale within constrained land supply.⁷⁴ Providing space through land release enables these firms to expand locally, keeping them within the county and catalysing a step-change in growth.

The central ~1.5% forecast is grounded in Oxford's historic performance, strengthened by site-level analysis, and made achievable through selective release of land that removes key growth constraints.

2. Northern Oxfordshire Council

≈ 1.3%

Evidence for growth rate:

- Forecast employment growth rates:
 - West Oxfordshire, from West Oxfordshire Annual Monitoring Report (2020): 1.6% per year.⁷⁵
 - Cherwell, from Cherwell Employment Needs Assessment (2024): 1.1% per year.⁷⁶
- Taking a weighted blend of these produces a central estimate of ~1.3%.

Justification:

- *Local growth hubs:* Growth is driven by market-town economies with distinct specialisms (rather than just spillover from Oxford):
 - Bicester has strengths in automotive and logistics. Bicester Motion, spanning a 444-acre estate, has emerged as a major centre for future mobility innovation and global automotive excellence. It hosts over 50 specialist businesses spanning classic car preservation to advanced mobility technologies.⁷⁷
 - Banbury is a market town in Cherwell district with a diverse economy focused on manufacturing, logistics, distribution, and services. Recent development includes new state-of-the-art logistics facilities, such as the Frontier Park industrial development.⁷⁸
 - Salt Cross Garden Village proposes around 2,200 new homes and a major science and technology park. Plans include a substantial 40 ha science and tech park adjacent to a park-and-ride facility, supporting jobs and business growth.⁷⁹
- *Additional economic assets:*
 - Witney and Carterton (supported by RAF Brize Norton) add further employment capacity. Witney is the largest economic centre in West Oxfordshire, with strong distribution-related activity and lower-than-average unemployment.⁸⁰
 - Upper Heyford (Heyford Park) is being developed as a mixed-use settlement with thousands of new homes, employment space, community facilities, and commercial infrastructure. Employment at the village centre currently supports over 1,200 jobs, with potential to add around 1,500 more by 2031.⁸¹

⁷³ Peak Economics and Møreforsking, 2023. Agglomeration and transport appraisal: new developments and research directions

⁷⁴ Savills, 2020. Competing requirements for land

⁷⁵ Based on an increase of 10,600 jobs between 2018 and 2031 in [West Ox annual monitoring report](#). [The May 2025 Draft Preferred Policy Options Paper](#) sets out that AECOM is drafting an ENA

⁷⁶ Growth of 20,100 jobs from the [Interim update Note - Cherwell Employment Needs Assessment update](#) that informed the employment land need in the proposed local plan: [Cherwell Local Plan Review](#), using BRES 2021 total Cherwell employment as the base

⁷⁷ Oxford Calling, 2024. Spotlight on Bicester: Bicester in the Driving Seat

⁷⁸ Ralph Davis. Ralph Davis Unveils New Banbury Facility: A Strategic Step Forward

⁷⁹ West Oxfordshire District Council, 2025. Salt Cross information page

⁸⁰ Lichfields, 2025. Carterton-Witney-Oxford Rail Corridor Economic Appraisal

⁸¹ Bidwells, 2025. The Village Centre At Heyford Park, Heyford Park, Camp Road, Upper Heyford, Bicester, Oxfordshire, OX25 5HD

- *Economic composition:* The area is characterised by a strong mid-tech sector, supported by agriculture and tourism, ensuring steady and resilient growth even without Oxford's global cluster effects.^{82,83}
- *Strategic independence:* Growth in Northern Oxfordshire is forecast to be lower than GO due to absence of Oxford's unique global cluster. However, GO's self-contained expansion removes overspill pressure, allowing Northern Oxfordshire to strategically invest in its own market-town and industrial strengths.

Combining robust local evidence sources provides a consistent growth forecast of ~1.3%. This figure positions Northern Oxfordshire slightly below GO's 1.5% forecast, reflecting a stable yet locally-driven growth path.

3. Ridgeway Council

≈ 1.2%

Evidence for growth rate:

- Forecast employment growth rates:
 - South Oxfordshire, from South and Vale ELNA, 2024: 0.4% per year⁸⁴
 - Vale of White Horse, from South and Vale ELNA, 2024: 0.7% per year⁸⁵
 - West Berkshire, from West Berkshire Employment Land Review, 2020: 0.7% per year⁸⁶
- However, a unified authority supports coordinated Science Vale strategy at Harwell and Milton and there is growth potential at Didcot, so growth potential is higher than it has been historically, with a lower ceiling than Oxford-centric GO scenario.

Justification:

- *Science Vale cluster:* Harwell Campus and Milton Park form the backbone of the Ridgeway economy, with further expansion already planned.
 - The Harwell Science and Innovation Campus spans 700 acres, hosts over 240 public and private organisations, and employs over 6,000 people across areas such as space, clean energy, life sciences, and quantum computing.⁸⁷
 - Moderna is establishing an Innovation and Technology Centre (MITC) within Harwell's Health Tech cluster, bringing mRNA R&D and manufacturing capability.⁸⁸
 - Located within Science Vale UK, Milton Park is the largest single ownership innovation community in the UK, over 250 organisations in sectors including life sciences, energy, space, and supporting technologies.⁸⁹
- *Didcot Garden Town:* Major housing and employment growth will cement Didcot's role as a hub for science-sector jobs, adding scale to the cluster. Didcot Garden Town is projected to deliver ~15,000 homes and ~20,000 jobs by 2031, raising growth above historic levels.⁹⁰
- *Other growth sources:* Wallingford, Wantage/Grove, and Newbury add further market-town and service-driven growth, ensuring economic diversity. Part of Vodafone headquarters in West Berkshire also set to be partially turned into a science park.⁹¹
- *Strategic coordination:* A unified authority supports coordinated Science Vale strategy at Harwell and Milton, and there is growth potential at Didcot, so growth potential is higher than historic level. A single authority enables more effective planning across these growth centres. Nonetheless, the lack of Oxford's world-class university cluster and its associated agglomeration

⁸² Experience Oxfordshire, 2024. Economic Impact of Tourism – Headline Figures- Cherwell

⁸³ West Oxfordshire District Council, 2023. The Economic Impact of West Oxfordshire's Visitor Economy

⁸⁴ Based on whole economy forecast job growth from 2021-2041. Table 8-2 from [South and Vale ELNA 2024](#), using BRES 2021 total South Oxfordshire employment as the base. Potential alternative based on the office and industrial growth that informed employment land need is 0.6% per annum.

⁸⁵ Based on whole economy forecast job growth from 2021-2041. Table 8-2 from [South and Vale ELNA 2024](#) using BRES 2021 total Vale of White Horse employment as the base. Potential alternative based on the office and industrial growth that informed employment land need is 0.9% per annum.

⁸⁶ Based on whole economy Experian forecast job growth from 2020-2030 from the [West Berkshire Employment Land Review](#)

⁸⁷ Harwell, 2024. Harwell Campus Named The UK's Most Successful Science Campus

⁸⁸ Merit, 2024. Moderna Selects Harwell Science Campus To Develop Innovation and Technology Centre in the UK

⁸⁹ Milton Park, 2025. Website

⁹⁰ Aecom, 2021. Didcot Garden Town Housing Infrastructure Fund Programme

⁹¹ BBC, 2025. Part of Vodafone site to become science park

effects means Ridgeway is capped at ~1.2% growth rather than reaching Greater Oxford's ~1.5%.

A central growth forecast of ~1.2% reflects a step-up from historic performance due to Science Vale and Didcot, while acknowledging that growth remains below Greater Oxford's due to lower levels of agglomeration and global reach.

Table 3 – 3UA absolute growth in employment, with the annual increase being the average over the period to 2042

Geography	2023 employment	Annual growth rate	Annual increase
Greater Oxford	183,400	1.5%	3,150
Northern Oxfordshire	112,400	1.3%	1,600
Ridgeway	209,400	1.2%	2,850
Total 3UA	505,100	1.3%	7,600

2UA

5.5 The 2UA model is forecast to deliver county-wide employment growth of around 1.1% per annum. The Oxford and Shires UA's combination of Oxford's urban priorities with more rural districts slightly dilutes its planning focus and creates challenges for delivering green belt sites, which can be politically sensitive. Ridgeway's growth also moderates to 1.1% (down from 1.2% in the 3UA model) as, under this governance, it must accommodate additional housing for Oxford commuters alongside pursuing its Science Vale and Didcot-led growth strategy. Table 4 sets out the evidence, data sources, and justifications underpinning each forecast scenario.

Table 4 – 2UA employment growth forecast

1. Oxford and Shires Council	≈ 1.1%
<p>Evidence for growth rate:</p> <ul style="list-style-type: none">Forecast employment growth rates:<ul style="list-style-type: none">West Oxfordshire, from West Oxfordshire Annual Monitoring Report (2020): 1.6% per year.⁹²Cherwell, from Cherwell Employment Needs Assessment (2024): 1.1% per year.⁹³Oxford City, from The Oxford City ELNA Interim Report (2025): 1.0% per year⁹⁴A weighted average of these district-level figures produces ~1.1% per year.This is also consistent with Oxfordshire's past long-term average of ~1.0% per year. <p>Justification:</p> <ul style="list-style-type: none">There are clear growth opportunities particularly around Oxford and Bicester/Banbury, as set out in 3UA the Northern Oxfordshire justification above.However there is also:<ul style="list-style-type: none">Fragmentation of priorities: Combining Oxford's high-growth, innovation-driven economy with more rural districts spreads governance attention across divergent needs, reducing Oxford's economic momentum. Research on local government fragmentation highlights that fragmented systems, especially those combining different urban and rural needs, may struggle with coherent economic strategy and can negatively impact growth momentum.⁹⁵	

⁹² Based on an increase of 10,600 jobs between 2018 and 2031 in [West Ox annual monitoring report](#). The May 2025 [Draft Preferred Policy Options Paper](#) sets out that AECOM is drafting an ENA

⁹³ Growth of 20,100 jobs from the [Interim update Note - Cherwell Employment Needs Assessment update](#) that informed the employment land need in the proposed local plan: [Cherwell Local Plan Review](#), using BRES 2021 total Cherwell employment as the base

⁹⁴ Rapleys, 2025. Oxford City – Employment Land Needs Assessment Interim [report](#): Appendix B, Job numbers Change 2024-42

⁹⁵ Northern Illinois University, 2019. Local Government Fragmentation: What Do We Know?

- *Coordination barriers:* Delivering politically sensitive green belt sites becomes more challenging in a larger, mixed authority. As a result, no comprehensive review or release is assumed under this scenario.⁹⁶
- *Fewer economic clusters:* In a mixed authority that combines Oxford with surrounding more rural districts, governance would be required to balance divergent priorities. This disperses attention and resources, making it harder to sustain a focused economic strategy. As a result, opportunities to develop concentrated, high-performing clusters are diluted, and the benefits of agglomeration are weakened.

A blended growth forecast of around 1.1% is supported by local evidence but constrained by the governance model. While some consolidation of councils would deliver efficiencies, the absence of a clear strategic focus holds back stronger performance. Growth would be steady but below the 3UA GO scenario. The Oxford and Shire Council is expected to underperform slightly compared with Northern Oxfordshire under the 3UA option.

2. Ridgeway Council ≈ 1.1%

Evidence for growth rate:

- Forecast is slightly reduced compared with ~1.2% in the 3UA Ridgeway Council model.
- This reflects the additional requirement for Ridgeway to accommodate commuter housing from Oxford, diverting resources away from Science Vale-led expansion.

Justification:

- *Retained strengths:* As set out in the 3UA Ridgeway Council justification, Science Vale and Didcot remain growth drivers, but resources are more stretched as Ridgeway will need to absorb some of Oxford’s commuter housing demand, diverting capacity away from investment in Science Vale-led sectors and diluting the region’s innovation-focused growth potential.
- *Diluted economic mission:* A governance model that balances Oxford’s overspill with local development needs hinders a clear focus on transformative, high-value science and innovation outcomes, unlike the strategic clarity a dedicated Oxford unitary could deliver.
- *Greenbelt release constraint:* No assumption of comprehensive green belt review or release further limits capacity for high-value economic activity.

Growth moderates to ~1.1%, reflecting a split between innovation-led expansion and supporting commuter housing pressures.

Table 5 – 2UA absolute growth in employment, with the annual increase being the average over the period to 2042

Geography	2023 employment	Annual growth rate	Annual increase
Oxford and Shires	264,700	1.1%	3,350
Ridgeway	240,400	1.1%	3,000
Total 2UA	505,100	1.1%	6,350

1UA

5.6 The single county-wide UA is forecast to perform the slowest at around 1.0% per year, as competing urban, suburban, and rural priorities make it harder to pursue bold, place-specific strategies. This is likely to result in steady but incremental growth rather than transformative change. There is little difference between 2UA and 1UA in terms of growth potential. However, 2UA is expected to grow slightly faster, supported by more coherent priorities, stronger place branding, and a more explicitly pro-growth stance adopted by West Berkshire. **Table 6** explains this in more detail.

⁹⁶ CPRE, 2025. "Greater Oxford" Proposal Threatens the Green Belt and Ignores the Bigger Picture

Table 6 – 1UA employment growth forecast

1. Oxfordshire Council	≈ 1.0%
Evidence for growth rate: <ul style="list-style-type: none"> Aggregated historical employment growth of the five districts amounts to ~1.0% growth per year. Historic county growth between 2010 and 2022 was ~17%, equating to ~1.1% annually.⁹⁷ The forecast of ~1.0% reflects incremental growth but falling short of the higher potential associated with more focused, multi-unitary models. 	
Justification: <ul style="list-style-type: none"> <i>Broad scope:</i> A single county-wide authority must balance Oxford's role as a global innovation hub with the needs of its rural districts and market towns. This wide scope inevitably spreads resources and investment more thinly, diluting the focus required to maximise Oxford's high-value cluster opportunities. Research on local government consolidation highlights how broad governance mandates can reduce policy clarity and weaken growth impacts.⁹⁸ <i>Conservative land-use approach:</i> Rural interests may limit green belt releases, diluting emphasis on high-value Oxford-centric developments and Science Vale. Political realities suggest that rural interests would likely resist significant green belt release. As set out above, CPRE Oxfordshire have already raised concerns that broader unitary structures risk Green Belt erosion and undermine planning integrity.⁹⁹ Without this, Oxford's most productive growth opportunities cannot be unlocked. <i>Lack of clear economic mission:</i> Unlike a dedicated GO or Ridgeway authority, a single county-wide unitary lacks a strong, singular champion for Oxford's global science and innovation mission. Without this, transformational initiatives risk being deprioritised in favour of consensus-driven compromises. <i>Stable but unambitious:</i> Growth is steady but incremental, with lower private-sector confidence due to diluted vision. A more ambitious single unitary could deliver stronger growth if backed by political consensus and strategic land-use/infrastructure investment, however this is not considered a realistic central case. <p>A ~1.0% annual growth rate reflects both Oxfordshire's historic performance and current planned trajectories, but does not capture the step-change potential that could arise from governance reform or strategic Green Belt release.</p> <p>There is little difference between 2UA and 1UA in terms of growth potential. However, 2UA is expected to grow slightly faster, supported by more coherent priorities, stronger place branding, and a more explicitly pro-growth stance adopted by West Berkshire.</p>	

Table 7 – 1UA absolute growth in employment, with the annual increase being the average over the period to 2042

Geography	2023 employment	Annual growth rate	Annual increase
Total 1UA	399,500	1.0%	4,150
+ <i>West Berkshire</i>	105,600	1.0%	1,100
Total 1UA (+ West Berkshire)	505,100	1.0%	5,250

⁹⁷ Oxfordshire County Council, 2025. Appendix 2 Option 1 [A New Council - Our Oxfordshire](#)⁹⁸ Northern Illinois University, 2019. Local Government Fragmentation: What Do We Know?⁹⁹ CPRE, 2025. "Greater Oxford" Proposal Threatens the Green Belt and Ignores the Bigger Picture

Housing implications

5.7 To ensure the employment growth forecasts are realistically deliverable, this section considers the housing need generated by the projected job growth. Aligning homes with jobs is essential: without sufficient housing, labour shortages and longer commuting patterns could constrain economic performance. The approach follows best practice set out in the Planning Practice Guidance and uses established employment need assessment methodology to translate job growth into housing requirements. The process is as follows:

1. **Change in economically active residents to meet job forecasts** – taking the projected job growth for each geography, and adjusting for:
 - **Commuting patterns** – apply commuting ratios to estimate how many of these workers would live in the same district.
 - **Double jobbing** – convert total jobs into the number of workers.
 - **Unemployment adjustment** – account for local unemployment rates.
2. **Population** – convert the change in economically active residents to population, based on the ratio of the total population per economically active resident.
3. **Homes** – convert the population into the number of homes required, based on household size.
4. **Home vacancy rate** – adjust to allow for a proportion of unoccupied homes.
5. **Homes-to-jobs ratio** – calculate the relationship between employment growth and housing.

5.8 Where possible, we based our calculations on the assumptions and inputs specific to each unitary authority within each proposal. This ensures that the resulting ratios are as accurate as possible and are not distorted by county-wide averages. The detailed assumptions for each geography are set out in **Appendix A**.

5.9 The table below presents results for two scenarios:

- **Scenario 1** reflects current commuting patterns, with some assumptions incorporated for the Greater Oxford scenario and existing patterns applied to all other geographies.
- **Scenario 2** assumes a 1:1 commuting ratio, representing a hypothetical situation in which each council delivers all housing needed to meet its employment growth within its own boundary. This scenario recognises that Oxford's current, tightly drawn boundary constrains its capacity to deliver sufficient land for growth, resulting in unmet need being exported to neighbouring unitary authorities. Under an expanded GO boundary, significant additional sites could be brought forward, enabling the city to meet its full housing need and allowing neighbouring authorities to retain full control over their own development and housing provision. While achieving a 1:1 ratio in practice is unlikely even with the expanded boundary, this provides an illustrative example of the potential scale of change.

Table 8 – Homes-to-jobs ratios and resulting annual homes

	Scenario 1: taking into account current commuting ratios		Scenario 2: assuming a commuting ratio of 1:1	
Geography	Ratio	Associated annual homes	Ratio	Associated annual homes
Greater Oxford	0.5	1,750	0.7	2,300
Northern Oxfordshire	0.8	1,300	0.8	1,150
Ridgeway	0.8	2,250	0.7	2,200
Total 3UA		5,300		5,650
Oxford and Shires	0.7	2,250	0.7	2,500
Ridgway	0.8	2,450	0.8	2,400
Total 2UA		4,700		4,900
1UA - Oxfordshire	0.7	3,000	0.7	3,050

Comparison to the Standard Method and other targets

5.10 This section compares the housing estimates derived from jobs growth with the Standard Method (SM) annual housing need figures and other relevant targets (the Interim Plan Update to MHCLG and the Oxfordshire Housing & Growth Deal). The purpose is to assess whether the housing numbers from the jobs growth approach align with what is planned and deliverable.

5.11 This helps to confirm that economic and housing growth are aligned, and the economic growth does not imply a level of growth above that GO, or any other area, can realistically deliver. It also ensures that minimal unmet housing need from higher growth scenarios would be passed on to other areas beyond the capacity-tested baseline.

Comparison to the SM

5.12 The table below compares the job-based housing numbers set out above with the SM housing targets. For the 3UA proposal, where boundaries have changed, the SM housing target has been reapportioned based on the population distribution in the new geographies.

Table 9 – Comparison of job-based homes figures to SM housing need (annual, dwellings per year)

	Scenario 1: taking into account commuting ratios			Scenario 2: assuming a commuting ratio of 1:1		
Geography	Annual homes from jobs	SM annual homes	Difference	Annual homes from jobs	SM annual homes	Difference
Greater Oxford	1,750	1,800	-50	2,300	1,800	+500
Northern Oxfordshire	1,300	1,700	-400	1,150	1,700	-550
Ridgeway	2,250	2,800	-550	2,200	2,800	-600
Total 3UA	5,300	6,300	-1,000	5,650	6,300	-650
Oxford and Shires	2,250	3,100	-850	2,500	3,100	-600
Ridgeway	2,450	3,200	-750	2,400	3,200	-800
Total 2UA	4,700	6,300	-1,600	4,900	6,300	-1,400
1UA - Oxfordshire	3,000	5,250	-2,250	3,050	5,250	-2,200

5.13 Across all geographies except Scenario 2 3UA GO, the housing estimates derived from jobs growth are below the SM figures. This suggests the plan would meet at least the SM baseline, unless exceptional circumstances justify a lower figure.

5.14 In the 3UA GO 1:1 commuting scenario, the jobs-based method estimates 500 homes above the SM. This uplift above SM can be justified in principle where it:

- remains within deliverable capacity;
- is tied to the economic strategy (R&D-led growth near the universities/hospitals), and;
- is supported by infrastructure phasing (e.g. Cowley Line).

5.15 We therefore treat the higher GO figure as deliverable, but will not adopt a requirement above SM unless the evidence for exceptional circumstances and infrastructure is secured.

- 5.16 Scenario 1 is considered the more realistic outcome, although a bit on the lower side, while Scenario 2 represents an illustrative maximum. As set out in **Appendix A**, Scenario 1 assumes that there is a net inflow of commuters into GO, albeit lower than the current Oxford City net inflow. A perfect 1:1 commuting ratio is unlikely, so monitoring and management mechanisms will be used to ensure sufficient housing supply is maintained.
- 5.17 Across all options we apply a capacity guardrail: the adopted baseline requirement will not exceed deliverable capacity, and any upside beyond SM is treated as contingent on site and infrastructure delivery. A monitor-and-manage clause could be applied to trigger a review if observed jobs growth sustainably out-turns the baseline (e.g., >10% for three consecutive years).
- 5.18 It is both logical and reassuring that the jobs-derived method produces lower housing need figures on the whole than the SM. This is because the SM takes account of wider factors – such as historic unmet need, affordability pressures, demographic change (including an ageing population), and migration trends – which this more simple homes-to-jobs approach does not capture.

Comparison to other targets

OCC 3UA plan

- 5.19 It is estimated that under the 3UA proposal, around 40,000 homes could be delivered within GO over 15 years. The basis for this estimate is the homes associated with additional sites identified in the 5th Studio work undertaken earlier this year. Over 15 years, this equates to 2,650 homes per year. The table below compares the two scenarios of job-based home growth against this figure.

Table 10 – Comparison of job-based homes figures to additional homes set out by the OCC 3UA plan

Greater Oxford	Scenario 1: taking into account commuting ratios			Scenario 2: assuming a commuting ratio of 1:1		
	Annual homes from jobs	OCC 3UA plan	Difference	Annual homes from jobs	OCC 3UA plan	Difference
1 year	1,750	2,650	-900	2,300	2,650	-350
15 years	26,250	40,000	-13,750	34,500	40,000	-5,500

- 5.20 The results suggest that the proposed jobs growth is likely to be deliverable in practice.

Oxfordshire Housing & Growth Deal

- 5.21 Although slightly dated another relevant target is the delivery of 100,000 homes between 2011 and 2031, as set out in the Oxfordshire Housing & Growth Deal. 100,000 homes over 20 years equates to 5,000 additional homes per year. The table below compares the two scenarios of job-based home growth against this figure. This is a historic, Oxfordshire-only commitment (i.e. excludes West Berkshire) and covers a different period; we therefore use it for context only.

Table 11 – Comparison of job-based homes figures to additional homes set out in Oxfordshire Growth Board

Geography	Scenario 1: taking into account commuting ratios			Scenario 2: assuming a commuting ratio of 1:1		
	Annual homes from jobs	Growth Board	Difference	Annual homes from jobs	Growth Board	Difference
3UA	5,300	5,000	+300	5,650	5,000	+650
2UA	4,700	5,000	-300	4,900	5,000	-100
1UA	3,000	5,000	-2,000	3,050	5,000	-1,950

- 5.22
- The jobs-based housing estimates are broadly comparable to the Growth Board’s county-wide target. For the 3UA proposal, the estimates are higher, which is expected as both cover a larger area than the county boundary by including West Berkshire. West Berkshire accounts for around 600 homes under scenario 1 and 650 homes under scenario 2. Adjusting for this would bring the 3UA proposal either below (scenario 1) or in line (scenario 2) with the target. This uplift is reasonable, as the 5,000-per-annum target does not account for the additional housing capacity that could be unlocked through green belt release within the extended GO boundary.
- 5.23
- For the 2UA and 1UA proposals, the jobs-based totals are below this target, reinforcing that these proposals would not require these areas to deliver more homes than can realistically be achieved.

Public First Study: transformational scenario

- 5.24
- The Oxford Transformational scenario assumes 2.3% annual growth, as set out in the 2024 Public First Study. This is based on creating an additional 450,000 jobs across the Oxford–Cambridge Arc over 25 years.
- 5.25
- The table below compares the housing demand generated under two job-based growth scenarios. The 2.3% growth rate results in significantly higher associated housing demand, which is likely to be undeliverable in practice.

Table 12 – Comparing annual homes derived from jobs growth of 1.5% to 2.3%

	Scenario 1: taking into account commuting ratios			Scenario 2: assuming a commuting ratio of 1:1		
Geography	1.5% growth	2.3% growth	Difference	1.5% growth	2.3% growth	Difference
Greater Oxford	1,750	3,800	-2,050	2,300	3,800	-1,500

6. Additionality, agglomeration and productivity uplift

- 6.1 This section sets out how the growth potential described above translates into additional economic value for Greater Oxford. It covers both the direct GVA associated with extra jobs and the further productivity gains that arise when more of those jobs are concentrated in and around Oxford. The analysis compares outcomes across the 3UA, 2UA and 1UA models and builds on the evidence presented earlier on how density raises productivity in knowledge intensive places (**paragraph 3.5**).

Approach

- 6.2 Projected jobs are converted into direct GVA based on the following methodology:
- **2023 baseline:** For each geography within each proposal, GVA per head is fixed at the 2023 level as the starting point for the projections.
 - **2024-2050 projection:**
 - **1UA proposal:**
 - GVA per head is assumed to grow each year at the historic national rate of real GVA per head growth over the period 2000–2023. This provides a benchmark against which the higher-growth scenarios can be assessed.
 - **2UA and 3UA proposals:**
 - For existing jobs, GVA per head also grows at the historic national rate. This reflects a deliberately conservative assumption that the productivity of current employment is unlikely to be significantly enhanced by structural change.
 - For new jobs, GVA per head grows at an elevated rate relative to the 1UA proposal in each geography. This uplift captures the expectation that new jobs anticipated under these proposal will be more productive and is calibrated to align with the ratios used to justify the employment growth assumptions.
- 6.3 This approach ensures that the projected relationship between employment growth and GVA growth remains consistent with historic patterns of economic performance. It also reflects the nature of job growth anticipated under the proposals, for example the expansion of lab space and related high-value sectors, as outlined in the employment growth section above. The resulting impacts for each proposal are presented in the table below.
- 6.4 An agglomeration multiplier is then applied to direct GVA that reflects how concentrated employment is relative to a fixed benchmark. The multiplier is derived from a relative density index using core and non-core shares and travel time decay weights, combined with an elasticity drawn from the literature. Agglomeration effects are measured incrementally against the base year, and the cumulative benefits up to 2050 are then discounted back to today at 3.5%.
- 6.5 Full steps, parameters and sensitivity tests are set out in the **Technical Appendix**.

Results

6.6

The results of the methodology set out in the Technical Appendix are set out in **Table 13**.

Table 13 – Additionality, agglomeration and productivity outputs across the three options

	3UA	2UA	1UA*
	Baseline (2023)		
Employment (2023)	505,100	505,100	505,100
Annual GVA (2023) (£bn)	£38.4	£38.4	£38.4
	Growth (2023-2050)		
Employment growth (2023-2050)	218,000	180,000	153,000
	Forecast impacts (2050)		
Annual direct GVA (2050) (£bn)	£64.1	£59.3	£56.8
Annual GVA from agglomeration (2050) (£bn)	£0.83	£0.12	£0.00
Annual total GVA (2050) (£bn)	£64.9	£59.5	£56.8
Agglomeration benefit per worker (2050, relative to 2023)	£1,083	£155	£0.00
	NPV over 27-year period (2023-2050), total additional from 2023		
Direct GVA (£bn)	£163.5	£141.2	£125.7
GVA from agglomeration (£bn)	£5.3	£0.8	£0.0
Total GVA NPV (£bn)	£168.8	£142.0	£125.7
	NPV over 27-year period (2023-2050), relative to reference case		
Direct GVA relative to reference case (£bn)	£37.8	£15.5	<i>Reference case</i>
GVA from agglomeration relative to reference case (£bn)	£5.3	£0.8	<i>Reference case</i>
Total GVA NPV relative to reference case (£bn)	£43.1	£16.3	<i>Reference case</i>
	Employment and GVA % (growth 2023-2050)		
Employment CAGR (AAGR)¹⁰⁰	1.3% (1.6%)	1.1% (1.3%)	1.0% (1.1%)
GVA CAGR (AAGR)	1.9% (2.6%)	1.6% (2.0%)	1.5% (1.8%)

**West Berkshire is added to the 1UA option with historic rates of employment growth continuing to 2050 to allow for direct comparison with the 3UA and 2UA options

¹⁰⁰ CAGR: Compound annual growth rate, AAGR: Average annual growth rate

What this means

Overview

- 6.7 By 2050, the 3UA proposal supports approximately 38,000 more jobs than the 2UA proposal and 65,000 more than the 1UA proposal, on a like-for-like geographic basis. Translating employment into economic output, annual GVA in the 3UA proposal rises from £38.4 billion in 2023 to £64.1 billion in 2050. This represents a CAGR of 1.9% over the period, equivalent to an AAGR of 2.6%. These growth rates are higher than those expected under either the 1UA or 2UA proposals, however they are still realistic based on a historical comparison. For example, from 2000-2023, real GVA in Oxfordshire grew by a CAGR of 1.3% and an average AAGR of 1.5%.
- 6.8 Proximity adds further value. Beyond scale, 3UA places a larger share of jobs where agglomeration works hardest, close to Oxford's research base and innovation spine. The density effect is modest each year but accumulates: by 2050 it is worth around £1,080 per worker, and on a discounted basis to 2050 the agglomeration component alone is £5.3 billion for 3UA. This uplift is calculated relative to a fixed 1UA 2023 benchmark and uses a conservative elasticity to avoid overstating spillovers.

Growth constrained by land supply and housing capacity

- 6.9 The 3UA forecasts of 1.5% employment growth and 1.9% real GVA growth are constrained not by a lack of demand, but by the limited availability of land for development. Oxford's capacity for expansion is determined by the need to balance economic growth with housing delivery. Even with the release of some Green Belt land, this would not be sufficient to meet the full scale of demand. As set out in **paragraph 5.25** of the housing implications section, an annual employment growth rate of 2.3% would generate housing demand that is likely to be undeliverable in practice.
- 6.10 Oxford's historic town centre further restricts opportunities for further development despite strong market demand. Taken together, these factors mean that the city's growth trajectory is defined less by economic potential than by the practical limitations of land supply and housing capacity.
- 6.11 In addition, realising this growth envisaged under 3UA will depend on timely investment in enabling infrastructure to unlock sites and capacity, as signalled by the recent Cowley Branch Line announcement.¹⁰¹

Oxfordshire's role with the Thames Valley

- 6.12 Metro Dynamics has recently set out an ambition for the Thames Valley Metropolitan Statistical Area (MSA) to achieve 2.3% real GVA growth, reflecting a return to pre-Covid levels. This is derived from the CAGR achieved across the MSA between 2013 and 2018. Oxfordshire's historically lower employment growth rate of around 1% has constrained the wider region's overall performance. Under the 3UA model, Oxfordshire could deliver 1.9% real GVA growth, which would make a meaningful contribution towards the Thames Valley's 2.3% growth objective.
- 6.13 Oxfordshire is unlikely to be able to exceed this level of growth given the land and housing balance constraints described above. By contrast, the 1UA and 2UA models, which represent lower growth scenarios, would therefore have a more modest impact on wider regional performance.

Why the gains are additional

- 6.14 The measured uplift is not simply activity moved around within the county. It arises from higher effective density relative to a fixed baseline, from better alignment with the location preferences of high value and mobile firms, and from reduced delivery friction across planning, land, transport, housing, and skills that enables timely capacity close to Oxford. Without that capacity and coordination, a portion of investment would leak to other UK or international clusters or arrive later and smaller.

¹⁰¹ Oxford City Council, 2025. Reopening the Cowley Branch Line for passengers

Fiscal implications

- 6.15 Applying the historic relationship that roughly 30 to 40 per cent of GVA accrues as public receipts provides an order of magnitude view of the Exchequer impact. On this basis, by 2050 annual tax receipts are approximately £1.6 – £2.2 billion higher under 3UA than 2UA, and approximately £2.4 – £3.2 billion higher than 1UA.

Overall value

- 6.16 On a discounted basis to 2050, the combined benefits of jobs driven GVA and proximity under 3UA total around £169 billion, around £27 billion above 2UA, making 3UA the strongest platform for higher value growth, sooner, and in the places where it counts.

7. Inclusive growth

OCC's track record

- 7.1 Oxford City Council has a strong record on inclusive growth. For example:
- The Economic Strategy 2022–32 sets “a new standard for economic inclusion”.
 - The Council established and promotes the Oxford Living Wage (£13.16/hour in 2025/26) with an employer accreditation scheme.
 - It co-leads the Oxfordshire Inclusive Economy Partnership (OIEP), which launched an Inclusive Economy Charter to embed social value across employers.
 - OCC was an early adopter of the OIEP Charter and has delivered 35 of 39 pledges, including actions on apprenticeships, inclusive recruitment and local procurement.¹⁰²
- 7.2 Draft Policy E3 (Oxford Local Plan 2042) requires major developments to submit a Community Employment & Procurement Plan (CEPP) showing how they will support an inclusive local economy and deliver social value.
- 7.3 Expected CEPP commitments include:
- a. Secure local construction jobs.
 - b. Provide construction apprenticeships/training for local residents.
 - c. Engage schools and colleges.
 - d. Secure local jobs in the operational/end-user phase.
 - e. Procure locally for ongoing supply chains.
 - f. Pay the Oxford Living Wage to all employees (except apprentices).
 - g. Use contractors that commit to the Oxford Living Wage / appropriate social clauses.
 - h. Source construction materials locally where feasible.
 - i. Provide affordable workspace.

Enhancing inclusivity through scale and governance

- 7.4 The 3UA proposal is projected to deliver greater economic growth than the 2UA or 1UA models. A larger economy means more residents benefit in absolute terms, as increased activity generates additional jobs, skills development opportunities, and investment across the region.
- 7.5 As an illustrative example, the Oxfordshire CEP target of 5% of construction jobs as apprenticeships implies that, by 2050, the annual number of apprenticeships supported by each proposal would be:
- **3UA:** 3,170
 - **2UA:** 2,935
 - **1UA:** 2,183¹⁰³
- 7.6 In addition, GO would enable delivery of mixed-tenure housing in well-connected locations, supported by improved public transport linking villages and employment clusters. This integration of housing and transport would create a more balanced and inclusive growth model, expanding economic capacity while also improving affordability, accessibility, and quality of life.
- 7.7 Planned growth at the city's edge, under a single authority, can be particularly inclusive. Coordinating transport, housing, and labour-market strategies ensures high-value clusters remain accessible to a wide pool of workers. As new science and technology jobs emerge, they stimulate demand for a broad range of supporting roles in services, supply chains, and construction. With GO, this growth would be managed to

¹⁰² <https://www.oiep.org.uk/>

¹⁰³ It is worth noting that the 1UA geography does not include West Berkshire, whereas the others (2UA and 3UA) do. If apprenticeships from West Berkshire were included, the total would amount to 2,785, still significantly less than the 3UA proposal.

spread opportunity across different skill levels and communities, maximising the benefits of Oxford's global economic strengths.

Delivering more affordable housing

- 7.8 The additional housing delivered under GO would include a significant proportion of council and affordable homes, in line with Oxford's Local Plan 2036 requirement that developments of over ten dwellings provide 40% social housing and 10% other affordable housing. Based on the projected 1,750–2,650 additional homes per year under the GO scenario (**Table 10**), this equates to around 700–1,060 new social homes and 175–265 affordable homes annually.
- 7.9 This scale of provision would make a material impact on Oxford's acute affordability challenges, where average house prices are more than 11 times local salaries. It would also directly support the 3,500 plus households currently on the City Council's waiting list, who face average waits of over five years.¹⁰⁴ Over just a few years, the delivery of thousands of council homes would help reduce poverty and transform lives.

Expanding access to community facilities

- 7.10 At present, only city residents can access the Council's community offer, including:
- **Free swimming** for under-17s at Barton, Ferry, Leys and Hinksey pools;
 - **Free youth clubs and activities** (e.g., the Oxford Youth Ambition programme);
 - **Discounted leisure membership** for residents on qualifying benefits (including carers and people on disability benefits).
- 7.11 Under GO, all Greater Oxford residents, including those in Berinsfield, Botley, Kennington, Kidlington and Wheatley, would be eligible for the offer.
- 7.12 The ambition is also to extend provision to Abbey Sports Centre (Berinsfield), Kidlington & Gosford Leisure Centre, and Park Sports Centre (Wheatley).¹⁰⁵

¹⁰⁴ Alan Boswell Group, 2025. Oxford residents waiting over five years for social housing

¹⁰⁵ Oxford City Council, 2025. Greater Oxford: One council. Local decisions. A better place to live.

8. Appendix A

Assumptions underlying the homes-to-jobs ratio

8.1 The tables below set out the assumptions and sources for each step in determining the jobs-to-homes ratio. For steps 1–4, the inputs are averaged across the unitary authorities included in each proposal (for the 2UA and 1UA options). For the 3UA option, the inputs are averaged across the LSOAs within the new unitary authority geographies.

Table 14 – Assumptions underlying each step of the jobs to homes ratio

	3UA			2UA		1UA
	GO	Northern Oxfordshire	Ridgeway	Oxford and Shires	Ridgeway	Oxfordshire
1. Change in economically active residents						
<i>Commuting ratio (for scenario 1 only)¹⁰⁶</i>	1.3	0.9	1.0	1.1	1.0	1.0
<i>Double jobbing (% of those who have two-jobs)¹⁰⁷</i>	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
<i>Unemployment rate¹⁰⁸</i>	3.7%	3.2%	2.9%	3.5%	3.0%	3.3%
2. Population						
<i>Population / economically active resident¹⁰⁹</i>	1.9	1.8	1.9	1.8	1.9	1.9
3. Homes						
<i>Population / average household size¹¹⁰</i>	2.7	2.4	2.4	2.6	2.4	2.5
4. Home vacancy rate¹¹¹	5.3%	5.0%	4.1%	5.1%	4.1%	4.8%
5. Homes-to-jobs ratio	S1: 0.5 S2: 0.7	S1: 0.8 S2: 0.7	S1: 0.8 S2: 0.8	S1: 0.7 S2: 0.7	S1: 0.8 S2: 0.7	S1: 0.7 S2: 0.7

¹⁰⁶ ONS, 2025. 2011 Census WU03UK - Location of usual residence and place of work by method of travel to work. The commuting ratio has been apportioned based on the origins of employees who would fall within the new GO boundary; 70% of the Oxford City ratio, 10% Cherwell, 8% South Oxfordshire, 9% Vale of White Horse, 4% West Oxfordshire

¹⁰⁷ 4.5% across Oxfordshire based on 2019 OGNA

¹⁰⁸ ONS, 2025. 2021 Census TS066 - Economic activity status; ONS, 2025. 2021 Census Population estimates - small area (2021 based) by single year of age - England and Wales

¹⁰⁹ ONS, 2025. 2021 Census TS066 - Economic activity status; ONS, 2025. 2021 Census Population estimates - small area (2021 based) by single year of age - England and Wales

¹¹⁰ ONS, 2025. 2021 Census TS041 - Number of Households; 2021 Census Population estimates - small area (2021 based) by single year of age - England and Wales

¹¹¹ ONS, 2025. Average of 2011 and 2021 Census Figure 1: Percentage of unoccupied dwellings for local authorities in England and Wales, 2021. [average taken as some 2021 data skewed by covid]

9. Appendix B

Technical appendix – additionality and agglomeration methodology

9.1 This appendix explains, step by step, how we estimate the economic impact of the three administrative options for Oxfordshire. We project jobs to 2050, convert jobs into direct GVA (in constant prices), and then add a small productivity uplift for agglomeration (i.e., the benefit of having jobs closer together around Oxford).

9.2 The model works by combining:

- Job growth by area (compounded to 2050);
- GVA per job, historical and current (held in 2023 prices) per area;
- Where jobs land (a simple core vs non-core weighting and a gentle distance-decay);
- A relative density index (how concentrated employment is around Oxford vs a fixed baseline); and
- A standard elasticity to convert small density differences into small productivity uplifts.
- We calculate the incremental agglomeration uplift year by year and (separately) a discounted total.

Step 1: Employment growth projections

9.3 The analysis begins with 2023 employment figures for each of the options under consideration.¹¹² Assumed compound annual growth rates (CAGRs), varying by area under each option to reflect differences in expected growth trajectories, are applied to project future employment levels through to 2050. These respective CAGRs by area within each option are as follows¹¹³:

- **3UA option:** Greater Oxford (1.5%), North Oxfordshire (1.3%), Ridgeway (1.2%);
- **2UA option:** Oxford and the Shires (1.1%), Ridgeway (1.1%); and
- **1UA option:** (1.0%).

Table 15 – Overall employment growth across options

Option	Current employment (2023 including West Berkshire)	Employment growth (2023-2050)
3UA	505,100	218,000
2UA	505,100	180,000
1UA + West Berkshire¹¹⁴	505,100	153,000

9.4 By 2050, the three options (3UA, 2UA, and 1 UA) show different absolute levels of employment, reflecting their growth assumptions. All options start from the same quantum of overall employment in 2023.

This step provides the baseline job projections that underpin the direct gross value added (GVA) uplift and contribute to later agglomeration calculations.

¹¹² Note: For new areas under each of the options that do not comply with existing local authority boundaries, we have deployed a best fit approach using existing lower-super-output-area boundaries.

¹¹³ Note: These CAGR percentages are justified in the main report.

¹¹⁴ Note: West Berkshire is added to the 1UA option with historic rates of employment growth continuing to 2050 to allow for direct comparison with the 3UA and 2UA options, which both include West Berkshire.

Step 2: Direct GVA

9.5

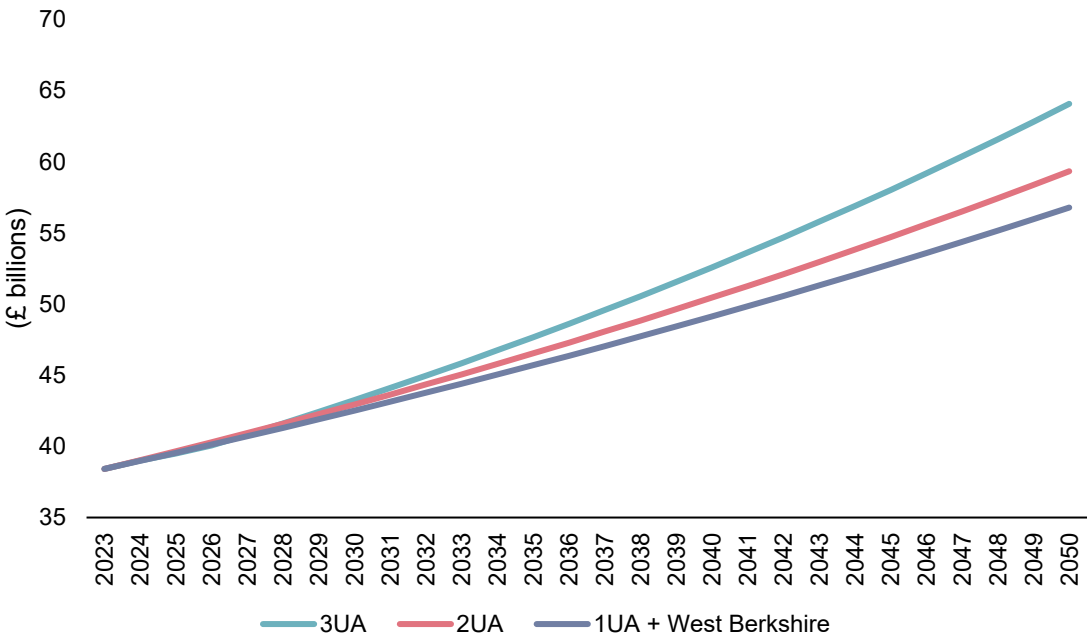
Projected jobs are converted into direct GVA based on the following methodology:

- **2023 baseline:** For each geography within each proposal, GVA per head is fixed at the 2023 level as the starting point for the projections.
- **2024-2050 projection:**
 - **1UA proposal:**
 - GVA per head is assumed to grow each year at the historic national rate of real GVA per head growth over the period 2000–2023. This provides a benchmark against which the higher-growth scenarios can be assessed.
 - **2UA and 3UA proposals:**
 - For existing jobs, GVA per head also grows at the historic national rate. This reflects a deliberately conservative assumption that the productivity of current employment is unlikely to be significantly enhanced by structural change.
 - For new jobs, GVA per head grows at an elevated rate relative to the 1UA proposal in each geography. This uplift captures the higher productivity anticipated under these proposal and is calibrated to align with the ratios used to justify the employment growth assumptions.

9.6

This approach ensures that the projected relationship between employment growth and GVA growth remains consistent with historic patterns of economic performance. It also reflects the nature of job growth anticipated under the proposals, for example the expansion of lab space and related high-value sectors, as outlined in the employment growth section above

Figure 5 – Direct GVA (£ billions) uplift generated by employment growth across options



9.7

Alongside the GVA estimates, the analysis also considers the potential impact on tax revenues accruing to government. Evidence from national statistics comparing GVA and public sector receipts between 1997 and 2017 suggests that between 30% and 40% of GVA is collected as tax revenues by HM Treasury.¹¹⁵ This occurs through a combination of business rates, VAT, corporate tax, and income tax. To capture this, the direct GVA uplift is multiplied by factors of 30% and 40%, providing a range for the possible fiscal benefit associated with the additional employment in each option.

¹¹⁵ ONS, 2025. Gross value added; ONS, 2025. Public sector finances

Step 3: Core vs non-core assumptions

- 9.8 Agglomeration benefits depend on job location as well as job numbers. Because exact distributions of future employment are unknown, a simple ‘core vs non-core’ structure is used:
- **Core jobs** are located in Greater Oxford and assumed to benefit fully from spillover effects; and
 - **Non-core jobs** are located further afield and assumed to benefit only partially.
- 9.9 This UA-level approach is deliberately simple. We recognise that several non-core locations (e.g. Harwell, Milton, Begbroke, Culham) are tightly linked to Oxford’s economy. We therefore do not heavily discount non-core jobs; instead we apply a moderate reduction so that jobs outside the city still contribute meaningfully to agglomeration.
- 9.10 Justification for this is as follows:
- **Productivity rises with access to economic mass.** Standard transport/economic appraisal links productivity to ‘effective density’ (employment mass weighted by generalised travel costs), which captures proximity to large, active labour and supplier markets. This is the basis of DfT’s TAG guidance on wider economic impacts.¹¹⁶
 - **Spillovers are highly local.** Evidence shows agglomeration effects attenuate quickly with distance/travel time; nearby activity has the strongest impact (from within-building scales up to neighbourhoods).¹¹⁷
 - **Stronger for knowledge-intensive/services.** Meta-analysis finds positive, material elasticities of productivity to density, with larger effects in services and knowledge sectors—consistent with Oxford’s economic mix.¹¹⁸
- 9.11 Greater Oxford accounts for 34% of R&D jobs in the study area, underscoring that the highest economic density and thus the strongest agglomeration potential sits in and around the city.
- 9.12 The core fraction is the proportion of each area’s jobs that are treated as within the Oxford ‘core’, meaning they behave as though they are directly connected to the Oxford core economy. This is essentially a weighting device that bridges the gap between actual geography (which is coarse at the UA level) and the finer geography at which spillovers operate. The core fractions utilised are as follows:

Area	Core fraction	Justification
3UA		
Greater Oxford	1.00 (fully core)	Oxford has the largest concentration of jobs in the county, especially in universities, hospitals, and knowledge-based services. These jobs are at the heart of Oxford’s economy, so we treat them as fully part of the core.
North Oxfordshire	0.00 (fully non-core)	This area is more connected to Banbury and the M40 corridor than to Oxford. It sits outside the main Oxford labour market, so we give it no core weighting.
Ridgeway	0.15	The Science Vale area (Harwell, Milton Park, Culham) has nationally significant R&D activity that is strongly linked to Oxford. We give it a small positive fraction to capture these links, without overstating them.
2UA		
Oxford and the Shires	0.55	When Oxford is grouped with nearby areas, commuting patterns suggest roughly half of jobs are strongly tied into Oxford’s economy and half are not. A 0.55 weighting captures this ‘mixed’ picture fairly.
Ridgeway	0.15	As above.

¹¹⁶ Department for Transport, 2018. TAG UNIT A2.1 Wider Economic Impacts Appraisal

¹¹⁷ Rosenthal, 2020. How Close Is Close? The Spatial Reach of Agglomeration Economies

¹¹⁸ Centre for Cities, 2023. The impact of agglomeration on the economy

Area	Core fraction	Justification
1 UA		
Oxfordshire-wide average	0.35	Taking the county as a whole, we apply a weighting that is above Oxford City's share (to reflect Science Vale's importance), but still below 0.50, since northern Oxfordshire remains outside the main Oxford labour market.

9.13 These fractions are applied to the projected job totals in each geography to calculate an overall weighted core share. This represents the effective proportion of employment assumed to be close enough to Oxford to access the full strength of spillovers.

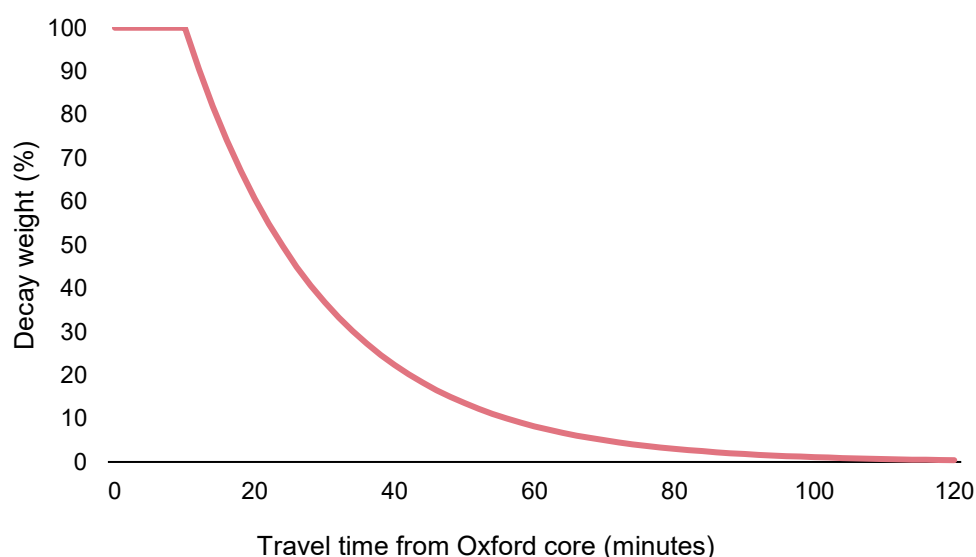
9.14 The use of core fractions ensures the analysis remains sensitive to how employment is spatially distributed, even when only broad area-level job forecasts are available. By combining these fractions with distance decay weights, the framework captures the reality that not all jobs contribute equally to agglomeration effects.

Step 4: Time-based decay weights

9.15 A critical element of the agglomeration framework is recognising that the productivity benefits of clustering fall away with distance from the economic core. The evidence is clear that spillovers fade with travel time. While jobs in Oxford itself (the core) experience the full extent of spillovers, jobs located further away capture only a proportion of this effect. The analysis incorporates this distance decay by applying travel time-based decay weights.

9.16 The rule applied is that jobs located within 10-minutes of Oxford are assumed to receive the full agglomeration benefit, so their weight is set at 1. Beyond this, the benefit declines smoothly following an exponential curve. For each minute of travel time beyond the 10-minute threshold, the weight is reduced by around 5% on a compounding basis.¹¹⁹ This means that the further a job is from the Oxford core, the less it contributes to the overall agglomeration effect, but the decline is gradual rather than abrupt.

Figure 6 – Visual example of decay weight being applied to travel time



¹¹⁹ KPMG, 2016. Effective Density: Measures of effective density for estimating agglomeration elasticities in Australian cities; Douglas, 2016. Wider Economic Benefits: When and if they should be used in evaluation of transport projects

9.17

The travel times used for each geography option were:

Area	Travel time	Justification
3UA		
Greater Oxford	15 minutes	Reflects the short journeys typical within a city. ¹²⁰ GIS travel time analysis, backed up by DfT statistics, shows people in urban areas usually get to services much faster than in rural areas. ¹²¹ This also reflects the benefits of having many jobs and services close together in city settings.
North Oxfordshire	40 minutes	Represents more rural parts of the county, where typical travel times are longer. ¹²² This figure is above the national average, reflecting that people here are further from key centres and services.
Ridgeway	40 minutes	Similar to North Oxfordshire, this area is rural and further from Oxford. Longer travel times are in line with patterns for rural communities and show weaker direct access to the city. ¹²³
2UA		
Oxford and the Shires	27 minutes	This is a middle-ground figure. It sits between the short city average and the national average (29 minutes). ¹²⁴ GIS analysis shows this matches areas that are partly urban and partly rural. ¹²⁵
Ridgeway	40 minutes	As above.
1UA		
Oxfordshire-wide average	32 minutes	This reflects the county as a whole. It is just above the national commuting average (29 minutes), which makes sense given Oxfordshire combines a compact city with large rural areas. ¹²⁶

9.18

Applying the exponential decay function produced the following decay weights:

- **3UA option:** Greater Oxford (0.78), North Oxfordshire (0.22), Ridgeway (0.22);
- **2UA option:** Oxford and the Shires (0.43), Ridgeway (0.22); and
- **1UA option:** (0.33).

These weights adjust the contribution of each area's jobs to the agglomeration effect. For example, on average, a new job in Greater Oxford counts as almost four times as influential as a job in Ridgeway, because it is closer to the Oxford core.

¹²⁰ Rosenthal, 2020. How Close Is Close? The Spatial Reach of Agglomeration Economies

¹²¹ DfT, 2021. Journey time statistics, England: 2019; TravelTime API

¹²² DfT, 2021. Journey time statistics, England: 2019

¹²³ DfT, 2021. Journey time statistics, England: 2019

¹²⁴ DfT, 2024. Transport Statistics Great Britain: 2023 Domestic Travel

¹²⁵ TravelTime API

¹²⁶ DfT, 2024. Transport Statistics Great Britain: 2023 Domestic Travel

Step 5: Relative density

- 9.19 Once decay weights and core fractions have been applied to each area, the next stage of the analysis is to calculate relative density. This provides a single index that captures how concentrated jobs are around Oxford after adjusting for both geography and distance. This reflects the idea that:
- Jobs in the Oxford core contribute fully to agglomeration benefits; and
 - Jobs further away still contribute, but less strongly, depending on their decay weight.
- 9.20 The calculation process involves three steps
- **Step 1 – Core weighted jobs:** For each option, the number of jobs is multiplied by the product of its core fraction and decay weight (δ) (see **paragraph 9.13**). This generates the effective number of “core-equivalent” jobs in that area.
 - **Example:** Ridgeway has a core fraction of 0.15 and a decay weight of 0.22. Each job in Ridgeway therefore contributes $0.15 \times 0.22 = 0.033$ ‘core-equivalent jobs.’
 - **Step 2 – Overall core share:** The total number of core-equivalent jobs across all UAs is divided by the total jobs in the option. This produces the jobs-weighted core share (s_{core}).
 - **Example:** if an option has 700,000 jobs in total and 280,000 of these are core-equivalent, then $s_{\text{core}} = 0.40$.
 - **Step 3 – Relative density index:** The final relative density is then a blend of the decay weight baseline and the core share. Conceptually, relative density increases as a larger share of jobs are located in or near Oxford. This is achieved through the formula:

$$\text{Relative density} = \delta + (1 - \delta) \times s_{\text{core}}$$

- **Example:** If $\delta = 0.70$ and $s_{\text{core}} = 0.40$, then relative density = $0.70 + 0.30 \times 0.40 = 0.82$.

The relative density step is crucial because it translates differences in job geography into a productivity effect. Without it, the model would simply scale GVA with job growth, ignoring where those jobs are located.

Step 6: Benchmarking against a reference case

- 9.21 Relative density values only become meaningful when compared to a baseline. To provide this benchmark, the 1UA option in the base year (2023) was used as the reference case. This reflects the existing configuration of Oxfordshire before any boundary changes are applied, ensuring the analysis is anchored in the ‘real world’ geography at the start of the period. Using 2023 as the base year avoids artificially inflating or deflating the agglomeration effect, since all options share the same employment quantum in that year.
- 9.22 The choice of the 1UA 2023 reference case also captures Oxfordshire’s distinctive spatial pattern: employment is relatively concentrated around Oxford compared with many other county areas, but remains more dispersed than in major metropolitan cores. This makes it a balanced benchmark, dense enough to reflect Oxfordshire’s current economic strengths, yet not so extreme as to overstate the gains from reconfiguration. By comparing subsequent options against this baseline, the model isolates the incremental effect of boundary choices rather than general trends in employment growth or density.
- 9.23 Each option’s relative density in later years is expressed as a ratio against this baseline. If the ratio is above 1, the option is denser than the baseline and therefore expected to deliver stronger spillover effects. If it is below 1, the option is more dispersed and weaker in terms of agglomeration.

- **Example:** In 2050, the 3UA option generates a relative density of around 0.83, compared to the reference value of 0.57 in the 2023 baseline. The RD ratio is therefore 1.46, which when raised to the elasticity (0.08) gives a small but meaningful productivity uplift. Applied to the GVA without agglomeration, this produces the incremental GVA attributed to agglomeration effects in the 3UA scenario.

Benchmarking ensures that productivity effects are not applied in absolute terms, but only in relation to a realistic baseline. Without this step, the analysis could overstate or understate spillovers by treating density as meaningful in isolation

Step 7: Translating relative density into productivity uplifts

- 9.24 The relative density ratios calculated in Step 6 show how concentrated employment is compared with the reference case. This step now translates these small shifts in effective density into measurable changes in productivity, and ultimately into additional GVA.
- 9.25 The link between density and productivity is captured by an elasticity parameter. This measures the percentage change in productivity associated with a 1% change in effective density. Based on the empirical literature, an elasticity of 0.08 was adopted.¹²⁷ This reflects evidence for knowledge-intensive and service-oriented economies, which characterise much of Oxfordshire's employment base.

From relative density to agglomeration multiplier

- 9.26 This process is as follows:
- **Relative density ratio:** For each option and year, the option's relative density is divided by the baseline RD_ref (Step 6).
 - **Apply elasticity:** This ratio is then raised to the power of the elasticity (0.08).

This step is critical because it operationalises the theoretical link between density and productivity. The elasticity ensures that even relatively small shifts in effective density are converted into realistic but meaningful uplifts in output

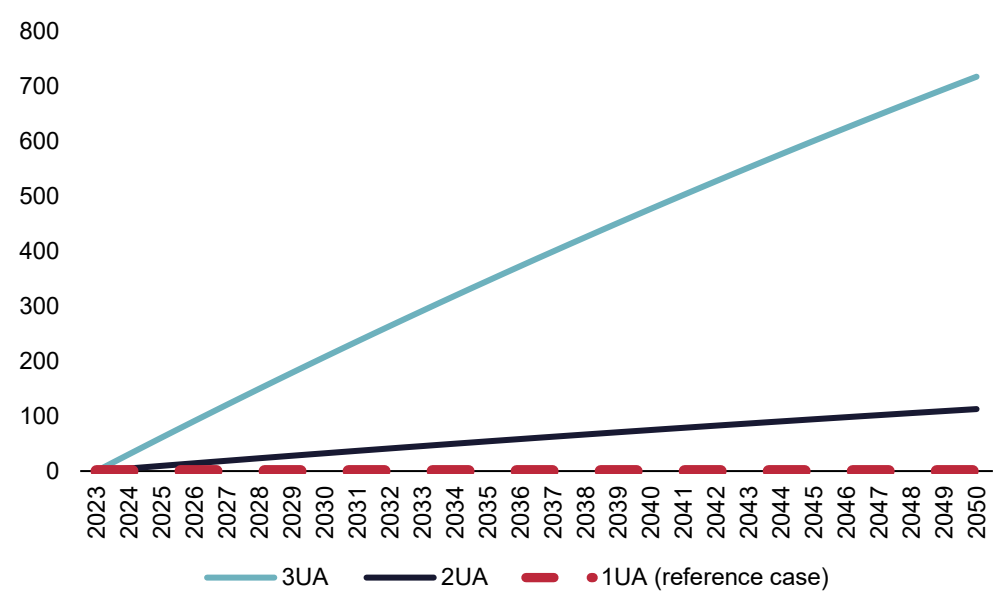
Step 8: Incremental agglomeration effects

- 9.27 The agglomeration multipliers derived in Step 7 are applied year by year to GVA without agglomeration to generate total GVA with agglomeration.
- 9.28 To avoid overstating the benefits in the early years, the analysis treats these effects on an incremental basis. This means the agglomeration benefit in any given year is measured as the uplift compared with the reference baseline year (2023), rather than as a cumulative effect from the start.
- In the first year (2023), the incremental agglomeration effect is set at zero, because the system has not yet diverged from the baseline.
 - From 2024 onwards, the incremental effect rises gradually as jobs grow and as more employment is concentrated closer to Oxford.
 - By 2050, the incremental effect reflects the full additional productivity benefit generated by the new boundary configuration.
- 9.29 In addition to total uplift, the analysis also expresses the incremental agglomeration effect on a per-worker basis. This metric divides the total agglomeration benefit by the number of jobs in that year, giving an indication of the average productivity gain per worker attributable to agglomeration. It is a useful way of

¹²⁷ Centre for Cities, 2023. The impact of agglomeration on the economy

interpreting the scale of the spillover effect relative to the size of the labour force. This shows not just how much extra GVA is produced overall, but how much of that uplift is embedded in the productivity of each job.

Figure 7 – Estimated productivity increase per job in each scenario



- **Sense check:** Literature suggests that there will be an uplift in productivity of 8% for every doubling in city size.¹²⁸ In the 3UA option, productivity by 2050 increases by approximately £700 per worker, relative to 2023 GVA per worker. This is an increase of 0.9%. The population across the entire area increases by 43% by 2050, less than half way to a doubling of city size. In the 3UA option, if all productivity benefits are applied to Greater Oxford (which will not happen in reality), the productivity uplift would be 2.1%. The population of Greater Oxford is expected to grow by 49% which is still less than halfway to a doubling of city size. It must also be recognised that the 3UA option represents a county-level area, whereas the benchmark evidence from the literature relates to city populations. Because population growth in both the wider area and Greater Oxford falls short of a doubling, and the estimated productivity gains are already below the 8% benchmark, this sense check gives confidence that our results are in the right range suggested by the literature while still remaining conservative.

Step 9: Discounting to Net Present Value

- 9.30 While the model generates annual agglomeration effects in constant prices, these values cannot be added directly to give a single measure of long-term benefit. Future gains are worth less than immediate ones, so the analysis applies a discounting process to bring all future benefits back to present-day terms.
- 9.31 A standard discount rate of 3.5% per annum was used, consistent with HM Treasury’s Green Book guidance for economic appraisal.¹²⁹

¹²⁸ Centre for Cities, 2023. The impact of agglomeration on the economy

¹²⁹ HM Treasury, 2022. Green Book supplementary guidance: discounting

An aerial photograph of London, showing the River Thames, the Tower Bridge, and a dense urban landscape. The Gherkin (30 St Mary Axe) is prominently featured on the right side of the image, partially cut off by the top right corner. The image is overlaid with a white curved shape in the top right corner.

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