Co-Location in London: **What's the State of Play?**

Turley

Contents

Acknowledgements

We are Programme Champions of New London Architecture's (NLA) Industrial & Logistics programme and sit on the British Property Federation's (BPF) Industrial Committee as well as the London Industry and Logistics Sounding Board. We also continue to work in partnership with other industry experts to examine the evolution of London's industrial and logistics sector as well as the concept of Co-Location over the coming year. We would like to thank the following organisations for their contribution towards this report and the rights to use their imagery:

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Introduction

Against a backdrop of a General Election, various local elections and now an emerging New London Plan, the political and planning landscape has shifted significantly since the publication of our 2024 report. The market is undoubtedly still volatile, with conventional residential planning applications still at an all time low in the capital.

This in itself has undoubtedly started to influence the Co-Location model in terms of what 'goes above' the industrial. We have seen year on year since we started this research that the types of industrial uses in Co-Location schemes are shifting towards lighter and more creative typologies (i.e. Use Class E(g)iii), moving away from the traditional B8 and (to an even greater extent) B2 uses. This trend has been acknowledged by the Mayor's London Plan Consultation Document, which poses the question of whether heavier industrial, logistics and warehousing uses may be better suited to new locations in the Grey Belt, with lighter industrial uses being more appropriate for Co-Location alongside residential development. It is not just the industrial component of Co-Location schemes that is evolving, however – more recently we have seen a shift in the residential typologies moving away from the conventional C3 'for sale' model to other rental typologies including Build-to-Rent (C3), Purpose-Built Student Accommodation (PBSA), and Co-Living.

This report is the fourth in our annual Co-Location in London series.

What is Co-Location?

Promoted by the London Plan (2021), "Co-Location" is a relatively new concept – still largely unique to London – which refers to the careful knitting together of industrial/logistics and residential uses to form mixed-use developments on designated or non-designated industrial sites. The approach aims to provide an additional source of housing supply to address the Mayor's ambitious housing targets while simultaneously intensifying employment floorspace provision. There are two approaches to Co-Location:

- Vertical, whereby residential uses are stacked on top of industrial/logistics uses; and
- Horizontal, whereby existing industrial uses are intensified on one part of the site so that a portion of the remaining land can be given over to residential development.

Methodology

Is Co-Location the answer to our housing and employment needs?

Our review provides a comprehensive overview of all full, hybrid, and outline planning applications for Co-Location schemes referable to the Mayor (i.e. the Greater London Authority) for Stage 1 and Stage 2 sign-off between 1 January 2019 – 31 December 2024.

Data was collected in relation to the following key indicators:

- Scheme name and address
- Description of development
- LPA
- LPA planning reference
- GLA planning reference
- Project Stage (i.e. GLA Stage 1/Stage 2, Determined)
- Industrial/employment land designation
- Existing employment use(s)
- Existing employment floorspace
- Proposed employment use(s)
- Proposed employment floorspace
- Overall uplift/reduction in employment floorspace
- Affordable workspace provision
- Affordable workspace discount
- Vertical stacking of employment uses
- Vertical stacking of employment and residential uses (i.e. residential above employment)
- Car parking proposed (employment)
- Car parking proposed (residential)
- Number of residential units proposed
- Residential density
- Residential mix
- Affordable housing provision (in terms of percentage of habitable rooms)
- Affordable housing tenure mix
- Maximum building height (in storeys)
- GLA Fast-Track Route compliance (in line with Policy H5 of the London Plan)
- Urban Greening Factor score
- Environmental Impact Assessment required/submitted
- Lead architect
- Applicant / Developer Type
- Post-consent status (built out, under construction, conditions discharged, no activity)
- PTAL Score
- Average on-site non-domestic CO_2 emissions reduction
- Average on-site residential CO_2 emissions reduction
- No. of student accommodation and Co-Living units

For the avoidance of doubt, non-referrable schemes were not included in the report.

For the purposes of the research

For the purposes of the research, Co-Location schemes were defined as those incorporating B1c (now Class E(g)iii)/Class B2/Class B8 and/or related sui generis industrial uses, as well as new homes (Class C3), student accommodation (Sui Generis), or Co-Living units (Sui Generis) forming part of the same overall development. In terms of its spatial and administrative boundaries, the research covers the 33 Local Planning Authorities (LPAs) as well as the two Mayor Development Corporations – namely, the Old Oak and Park Royal Development Corporation ('OPDC') and the former London Legacy Development Corporation ('LLDC'), whose town-planning functions were returned to the London Boroughs of Newham, Hackney, Tower Hamlets and Waltham Forest on 1 December 2024.

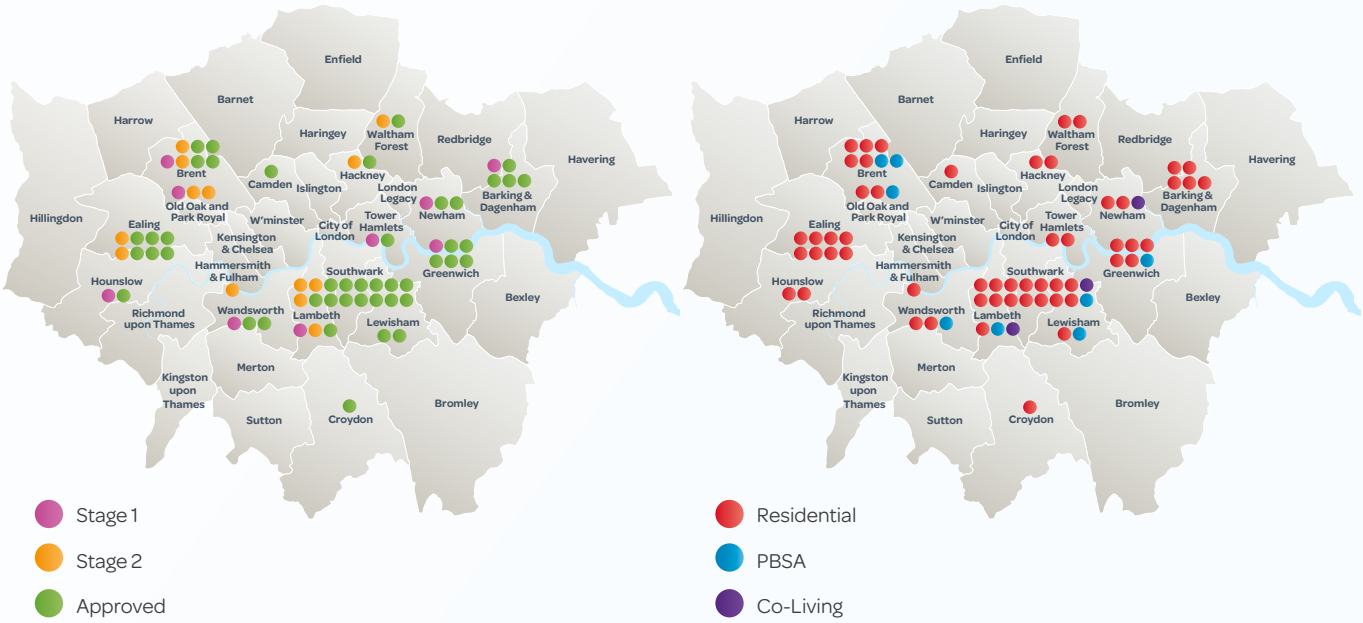
All analysed data has been retrieved from the public domain and included GLA Stage 1 and 2 Stage Reports, Decision Notices, Committee/Officer Reports, and other Section 106 Agreements. This report seeks to interrogate the pipeline of deliverable Co-Location schemes in London. Accordingly, several schemes which formed part of the evidence base for last year's report have since been removed, and do not inform the figures set out in this year's report. For clarity, schemes have been removed from the evidence base where they have been:

- Refused by the Local Planning Authority ('LPA') or Mayor, or later dismissed at Appeal;
- Withdrawn by the Applicant during the determination process; or
- Superseded by fresh planning applications for non-Co-Location schemes on the same site.

Research & findings

Section 1: Location and Applicants

Distribution of Co-Location schemes across London



Distribution of Co-Location schemes across London by London borough/development corporation

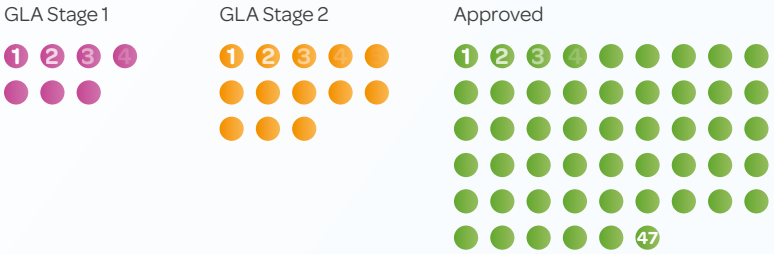
With challenging market conditions in association with conventional residential and alternative rental products still dictating market activity, this year's survey results continue to show limited growth in the pipeline of Co-Location schemes – a trend we have observed for a few years now. However, it is expected that the coming months might already indicate whether this position will change given the Government's strong focus on the delivery of new homes, including the £39 billion investment in social and affordable housing announced in the June 2025 Spending Review, the changes introduced in the December 2024 version of the National Planning Policy Framework ("NPPF"), and the resulting increased housing targets for London which will need to be accounted for in the Mayor's upcoming London Plan Review, and which are already shining through in the linked London Plan Consultation Document and the Mayor's Growth Plan.

Whilst the inclusion of alternative housing products indicates that the Co-Location model is flexible, adaptable and capable of providing a range of accommodation types above or in combination with employment uses, it is clear that location and access to public transport and/or other social infrastructure is key. Boroughs like Southwark, Ealing, Brent and Barking & Dagenham continue to lead the way, particularly in locations around key transport nodes.

Planning status of all assessed Co-Location schemes in the pipeline

As set out in the Methodology, the research undertaken to inform this report focused on schemes which have reached at least GLA Stage 1. This year's results show an increase of schemes at Stage 1 (last year: one), with a limited growth in approvals (up seven from last year). We expected a number of schemes at Stage 2 last year (19) to move to Approval in this year's report; however, for a variety of reasons (apparent delays in planning process potentially due to viability, withdrawals, or refusals, etc.) this has not happened, indicating the challenging market conditions across 2024.

Status of Co-Location schemes in the development pipeline



Delivery of Co-Location schemes

Last year we first researched whether approved Co-Location schemes show signs of delivery. Up from 58% in 2023, 70% of all approved schemes show signs of activity / on-site delivery (discharge of planning conditions and/or commenced demolition/construction activities). More than half of those schemes even show signs of implementation on site, demonstrating that the Co-Location model continues to be delivered in practice, thereby has the potential to deliver both new housing as well as modern industrial and logistics floorspace.

Schemes showing signs of activity / on-site delivery (i.e. discharge of planning conditions/obligations or construction-related)

70%

Schemes where construction (inc. demolition work) **appears to be underway**

of which **36%** show demolition/ construction activity

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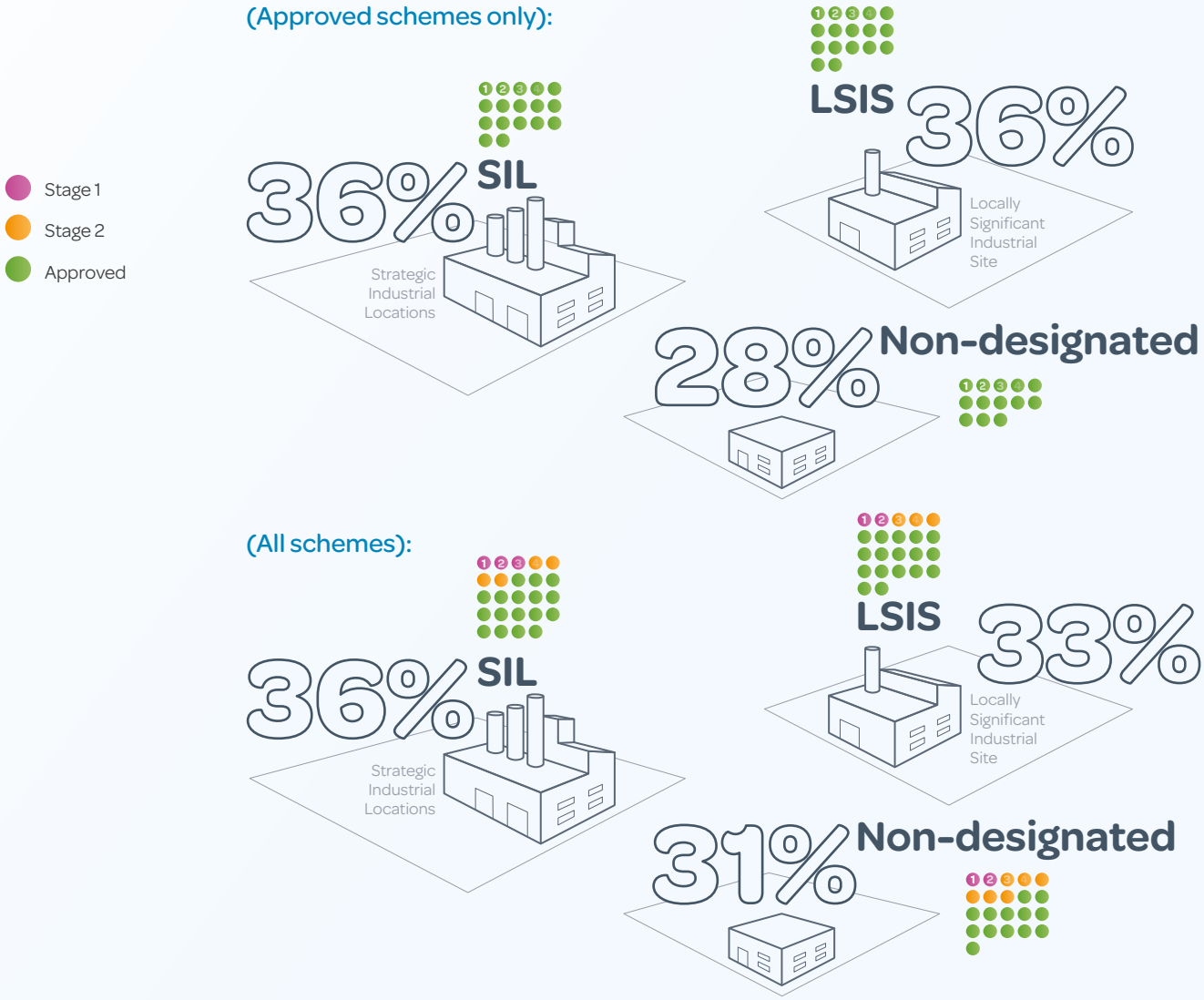
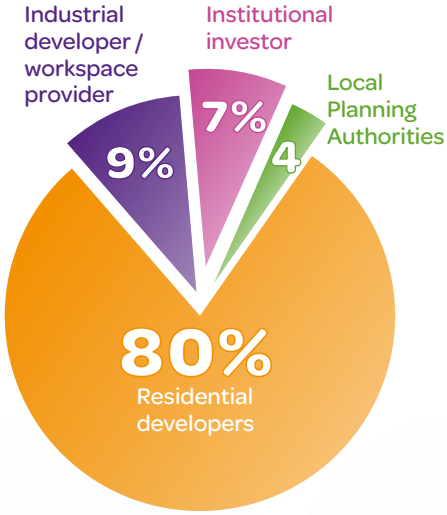
Designation of sites accommodating Co-Location schemes



Over the past year, we have seen little movement in the land use designations accommodating Co-Location schemes which are brought forward – almost equally – across all types of industrial land including Strategic Industrial Locations ("SIL"), Locally Significant Industrial Sites ("LSIS") as well as non-designated industrial land. It will be interesting to see how this develops in future years and whether we are seeing a greater shift towards LSIS (or non-designated sites) in line with the objectives of London Plan Policy E7.



Type of applicant

The majority of Co-Location schemes are still brought forward by (primarily) residential developers/housebuilders, followed by (primarily) industrial/workspace developers and institutional investors. The data has not changed significantly from previous years, although it is interesting to see that the Co-Location model still attracts more residential developers than institutional investors or industrial developers, even though the provision of suitable, occupier-oriented employment floorspace is key to obtaining support for and delivering these truly mixed-use schemes. This further highlights the importance of potential Joint Ventures between different specialist developers to unlock and bring forward a form of Co-Location scheme which addresses and balances both residential and employment requirements equally.

Bloom viewpoint: Correlation of industrial & housing uses

Bloom is a specialist investor and owner of multi-let industrial estates in urban areas and cities, with one of our strategies focused on inner London to provide our customers with closer proximity to businesses and consumers. Rather than delivering estates in traditional industrial locations, this strategy focuses on central, infill locations where there is little, to no competing industrial stock evident with our new development projects in Fulham, Brixton or Camberwell.

The very nature of these assets is that they are 'Co-Location', nestled in amongst various uses including residential, office, retail, healthcare and schools. This is not a new concept but is certainly reversing a more recent trend of historical industrial sites in cities being re-developed into higher value uses such as residential. In fact, there has been industrial space functioning effectively next to alternative uses across the UK since the 1700s, ever since the advent of the industrial revolution when factories attracted people to live nearby for job opportunities and this caused the development of cities and industrial towns, and ultimately urbanisation.

Whilst these industrial buildings continue to create substantial economic investment and job creation, nowadays, there is much more pressure on land in urban areas from competing uses limiting viable opportunities to deliver the industrial space to provide cities with the goods and services needed to not only survive but thrive. This is coupled with an increasing number of considerations for town planners and developers across areas including sustainability, transport, amenity, regulation, health and safety and visual impact which influence the design, configuration and operation of these assets.

These areas can be hard to solve whilst retaining viability, often magnified by political preference to prioritise residential to meet ambitious housing targets. Co-Location offers a solution, either in the traditional sense discussed above or through collaborative masterplanning of areas and individual schemes to incorporate multiple uses including industrial.

However, this needs active and willing collaboration from day one from all parties to ensure the buildings delivered work appropriately for each of the target users, may that be residents, retailers or warehouse occupiers for example. This hasn't been done many times in London in recent times, but if executed correctly can enable these uses to work in relative harmony together as neighbours whilst also providing cities with the much-needed work space and housing to aid economic growth. Aligning incentives is important with all uses being considered equally at the design stage, rather than certain uses being prioritised and others being more of an after-thought which doesn't result in optimal product for the end-user.

Tom Davies
Co-founder & Managing Partner
Bloom

Section 2: Policy Approach

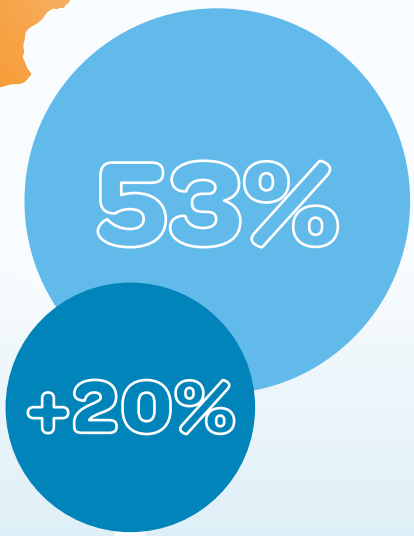
Policy

In last year's report, we noted that more LPAs than ever had either adopted, or were intending to adopt, dedicated Co-Location policies.

This trend shows no sign of abating, with the past year having seen continued growth in local-level policy support for Co-Location. As shown on the map below, **nine** LPAs have currently adopted policies relating to Co-Location, while a further **nine** have published draft policies. This year therefore marks something of a milestone in the evolution of Co-Location policy: for the first time, more LPAs than not (53%) have either adopted, or intend to adopt, policies relating to Co-Location. This represents a 20% increase on the equivalent figure (33%) recorded in last year's report.

53% of LPAs have adopted or published draft policies relating to Co-Location

A **20% increase** on the equivalent figure (33%) recorded in last year's report



The past year has also seen an uptick in the number of boroughs with sites allocated for Co-Location. At present, 18 LPAs have published site allocations, which require the provision of new homes and industrial floorspace within a single scheme, while a further eight LPAs have consulted on draft site allocations. In total, therefore, more than seven-tenths (71%) of LPAs have allocated sites for Co-Location in some form, up from two-thirds (66%) last year.

71% of LPAs have allocated sites for Co-Location in some form

In addition to ensuring conformity with Policy E7 of the London Plan, the adoption of dedicated Co-Location offers the chance for LPAs to ensure that Co-Location schemes better address specific local policy aims and objectives, such as through requirements to provide affordable workspace (subject to viability) or premises suitable for small and medium-scale enterprises. Site Allocations, meanwhile, are often a necessity to bring forward Co-Location schemes, given their significant scale and complexity and, relatedly, the need for certainty to unlock investment and ensure comprehensive development that effectively balances industrial and residential requirements.

At present, ten (33%) LPAs have published separate Supplementary Planning Documents ('SPDs') relating to Co-Location, which typically take one of two forms: namely, area-specific spatial planning frameworks covering large Masterplan or Growth Areas, or supplementary guidance documents which set out more detailed policy criteria relevant to Co-Location schemes.

In summary, the overall geography of Co-Location policy across London's boroughs has continued to evolve, with outer London boroughs such as Harrow and Bromley now acknowledging and signalling their intent to support Co-Location through provisions in their draft Local Plans, expanding this approach beyond its traditional concentration in more central London boroughs such as Southwark. This may prove to be a promising sign for the future of Co-Location within the capital, given that there appears to be a correlation between those boroughs that have published Co-Location-related policies and guidance and those that have received higher numbers of applications for Co-Location schemes.

The Mayor's consultation on the next London Plan, published in May 2025, suggests that this trajectory of growing policy support for Co-Location is likely to continue. While it acknowledges the challenges around delivery and the need to maintain sufficient industrial capacity, the Consultation Document continues to acknowledge Co-Location as a suitable mechanism for housing supply, which can *"enable homes to come forward alongside industrial uses"*.

While the consultation document keeps the discussion of Co-Location at a relatively high level at this stage, it will be interesting to see how the Mayor's approach evolves in the draft London Plan and how this strategic direction subsequently feeds through into the continuing evolution of Co-Location geography across London's boroughs, both in terms of policy adoption and the spatial distribution of schemes coming forward.

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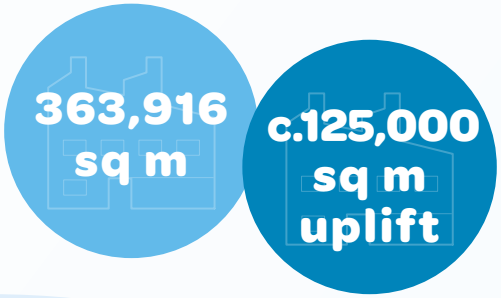
Section 3: Employment

Co-Location as a driver of industrial intensification?

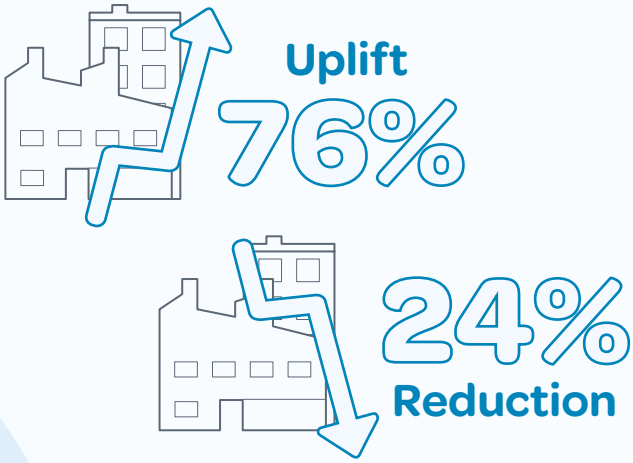
The re-provision or intensification of industrial or employment floorspace is a key component of Co-Location schemes, and should be considered as important as the delivery of new (affordable) housing which is usually the centre of attention. However, whilst there is a small overall reduction in employment floorspace generated through Co-Location schemes compared to last year's figures (due to some schemes no longer being in the pipeline as they have been withdrawn, refused or re-purposed), combining all types of Co-Location schemes forming part of our research, the model is still expected to deliver in the region of 365,000 sq m of new industrial and logistics floorspace.

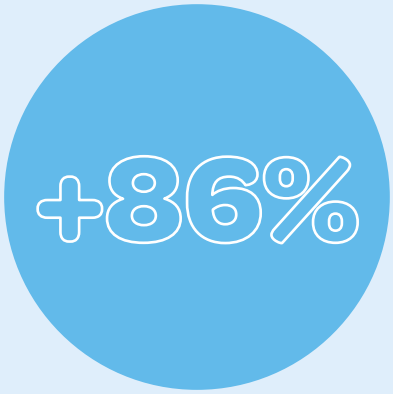
More than three quarters of all schemes (76%) deliver an uplift in floorspace, a trend we observe across all recent submissions/determinations, indicating a clear focus for decision-makers. Cumulatively, the schemes achieve a net increase in floorspace of 53% compared to the existing provision (+125,000 sq m). Whilst industrial intensification can and should be measured across a range of criteria including how effectively a site is used, (including its operational yard space provision and, often most important, its volumetric capacity to accommodate modern racking systems, modern manufacturing equipment or having the ability to provide additional mezzanine floorspace at a later date), the increase in floorspace is generally seen positively as contributing to addressing London's industrial or last-mile demands, especially where vast amounts of designated employment land were lost over the past 25 years.

Total proposed industrial floorspace in approved and submitted Co-Location schemes



Proportion of Co-Location schemes providing more than three quarters of a net uplift in industrial floorspace compared to the existing on-site provision:





Average uplift in industrial floorspace of Co-Location schemes compared to existing on-site provision

Employment land uses in Co-Location schemes

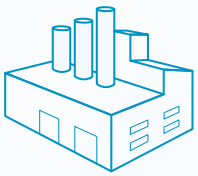
One of the most interesting observations in recent years has been the shift from more 'traditional' (B8, B2, sui generis) to more 'residential-friendly' (E(g)(iii)) employment uses on Co-Location sites. This trend is probably non-reversible and follows the nature of Co-Location schemes, especially those accommodating residential above employment uses (vertical as opposed to horizontal Co-Location). Nevertheless, the trend that the overall loss of, for instance, B2 uses is somewhat stabilising. Compared to our first report published in 2022 where the loss of B2 uses was at 8%, the loss has now stabilised at c.5-6% for the third year in a row. Nevertheless, we still see a big shift from sui generis, B2 and B8 uses towards light industrial uses in the schemes coming forward. Local Planning Authorities and the GLA will need to carefully assess how this contributes to its evidenced needs and whether non-Co-Location sites are capable of meeting any wider requirements.

The GLA are evidently aware of this issue, with the London Plan Consultation Document acknowledging that Co-Location is "usually restricted to light industrial uses alongside non-industrial space" and noting the challenges this presents for delivering the full range of industrial capacity that London requires. It remains to be seen whether the next London Plan will be more successful in delivering a broader range of industrial uses through Co-Location.

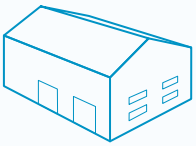
Existing industrial / employment uses

B1c
27%

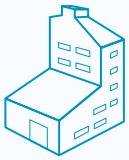
B2
20%



B8
33%



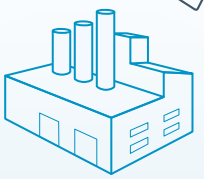
Sui Generis
19%



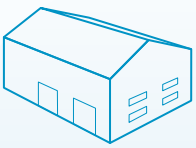
Proposed industrial / employment uses

B1c
55% ↑

B2
16% ↓



B8
29% ↓



Sui Generis
0% ↓

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Affordable workspace

The provision of affordable workspace is a policy requirement amongst many boroughs, although it is not always seen as being viable, especially in areas where market rents are already comparatively low. Our research shows that c.45% of all Co-Location schemes secured an element of affordable workspace via Section 106 Agreements. Of those that provide affordable workspace, this constitutes – on average – 10.7% of the overall employment floorspace (a small reduction compared to last year's average of 11.2% and closer aligned to many policies normally requiring at least 10%).

45%

of schemes provide affordable workspace

Of the Co-Location schemes that provide affordable workspace, the average provision is:

10.7%

While the average provision therefore remains policy-compliant by the standards of most boroughs, the downward trend seen in recent years suggests that delivering affordable workspace as part of Co-Location schemes is becoming increasingly challenging from a viability perspective. This is acknowledged by the London Plan Consultation Document, which recognises ongoing challenges with affordable workspace delivery and notes that it *"can be challenging to deliver as part of industrial intensification and can constrain the large and often specialised layouts needed for some industrial uses"*.

Momentum viewpoint : Co-Location & last-mile

As more Co-Location developments are explored and designed, there is increasing awareness that the industrial part of these sites need to operate with lower noise levels and vehicular movements compared to traditional big box industrial sites. This is considered particularly important in urban locations and for vertical Co-Location development to harmonise with residential land uses. The uses of industrial land are diverse, even within the category of 'light industry', and are influenced by what the surrounding landscape allows in terms of spatial and operational constraints. With the increasing demand for consolidation hubs and last mile strategies from commercial developments in central London, if carefully designed and managed, might last mile logistics be a suitable complimentary land use to be co-located with residential land uses?

The 'last-mile' is defined as the last step in the supply chain however the actual distance of the 'mile' varies depending on where the site and the end-user are located. A last-mile logistics centre is typically designed to consolidate incoming goods onto smaller vehicles such as electric vans and cargo bikes. As such, the overall number of Heavy Goods Vehicle (HGV) movements would be reduced or limited compared to traditional warehouses, which would complement the residential uses.

Last-mile logistics sites benefit from being located close to urban centres as the greater the physical distance to the final destination of the goods being delivered is reduced, the increased potential for those trips to be carried out on cargo bikes or electric vans. Similarly, urban centres are more likely to advantage from better public transport connectivity which would improve connectivity for both employees of the industrial component as well as the residential occupiers, and reduce the overall need for car parking spaces. As with any other industrial provision on Co-Location schemes, careful design considerations will be necessary. For example, to ensure that the vehicular access for the last-mile logistics hub is separated from the residential access points. Whilst the concept is still relatively new, we think there is an opportunity to develop the feasibility of these uses as part of a wider exploration of how sub-defining industrial uses (e.g. logistics hubs versus manufacturing) can help identify the most suitable Co-Location opportunities.

Kana Namoto
Senior Consultant
Momentum

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Section 4: Housing (C3)

New homes

London's housing crisis continues, with increasing the delivery of new homes a key priority for the new national Government, re-elected Mayor of London and all of the London Boroughs. This has been reflected in a suite of well-documented revisions to national planning policy and has included – in light of current market conditions – the GLA bringing forward additional measures to support housing delivery under the Mayor's planning and housing powers. Most notably the Practice Note (December 2024) aimed at accelerating housing delivery, and the recently announced London Growth Plan [1] which is seeking to boost growth and productivity across the capital.

Our survey results in relation to Co-Location schemes providing new homes reflect this challenging market context and reinforce the need for further policy support to boost housing (alongside employment uses) delivery. Our latest findings confirm 20,486 homes have been approved (only) as part of Co-Location schemes which is a c.21% reduction compared to last year (22,580 in 2024), whilst the number of homes in the system (at Stage 1 / 2 or approved) is 27,354, a c.23% reduction from 2024's figure of 29,668, resulting in a small reduction in the average number of homes per scheme (now 471 down from 494 in 2024).

1 Greater London Authority (GLA) 27 February 2025 https://www.london.gov.uk/london-leaders-unveil-growth-plan-turbocharge-productivity-and-add-more-ps100bn-londons-economy

The reduction in homes is more pronounced than last year but, as noted earlier in this report, this is primarily a consequence of previously surveyed strategic-scale applications being withdrawn or reconfigured to respond to changing market requirements. Nevertheless, it is clear that the Co-Location model is reflecting the wider challenges in the stagnation of the housing sector. Our findings do, however, continue to demonstrate that a significant pipeline of new homes could be delivered by this development type, alongside new high-quality employment floorspace therefore meeting the aims of national, regional and local Government to deliver new homes and boost growth.

The London Plan Consultation Document's acknowledgement that Co-Location schemes have seen limited build-out rates – with less than 40% of the 4,500 homes per year given planning permission currently under construction or built – reinforces these findings and highlights the broader delivery challenges facing the housing sector. However, the document's continued emphasis on Co-Location as a mechanism for housing supply, combined with its capacity to simultaneously deliver new homes and employment floorspace that aligns with the Mayor's growth objectives, suggests that Co-Location will likely remain an important component of London's housing strategy as it seeks to achieve its ambitious target of delivering 88,000 new homes per year.

Total number of new homes coming forward across all Co-Location schemes:

20,486 (Approved only)

27,354 (Currently at Stage 1/Stage 2 & approved)

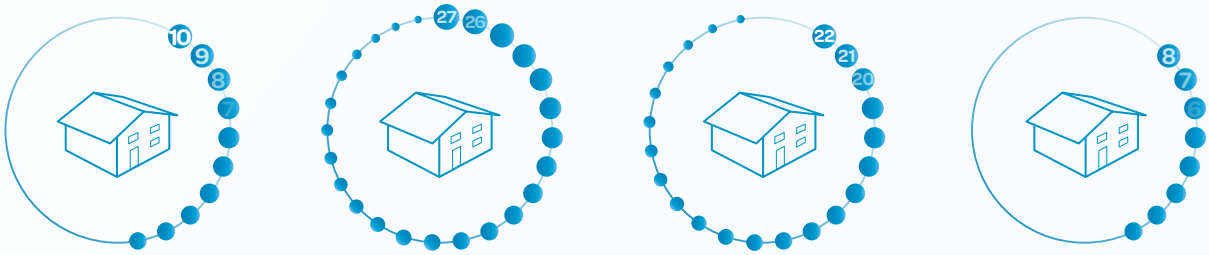
© Chetwoods

471 Average number of homes delivered in Co-Location schemes

– 23

Affordable housing

At the forefront of the Mayor's manifesto commitments on providing new high-quality homes, is the need to deliver new affordable housing. However, economic viability continues to affect the sector on both traditional residential-led schemes as well as Co-Location developments and can be a significant factor preventing schemes from getting off the ground (or even obtaining planning permission). Our research finds that the average Co-Location scheme delivers 36.84% affordable housing, which – while still above the London Plan's minimum 35% target – is down slightly from the 38.11% average recorded in 2024 and 38.48% average the year before. This is largely a reflection of the much lower average affordable housing provision (22.3%) of Co-Location schemes submitted since the beginning of 2024, but could also continue to be affected further in the coming years if the residential typology being favoured is PBSA or Co-Living where not all policy across the Boroughs in London require conventional affordable housing to be provided, rather policy compliant routes are generally to provide affordable rents of payment in lieus. It remains to be seen whether the new national and London-level policy guidance aimed at accelerating (affordable) housing growth will be successful in reversing this trend.



© GettyImages

36.8%
affordable housing

slightly down from the **38%** average recorded in 2024 and **38.5%** average the year before

Section 5: PBSA and Co-Living

Although not the majority of schemes, there has been a pronounced shift in the last year to the residential element of Co-Location schemes being the alternative rental products, namely Purpose-Built Student Accommodation (PBSA) and Co-Living. Now **16.4%** of Co-Location schemes across the capital have one of either PBSA or Co-Living as the residential element of the co-located scheme. Notably, this figure rises to **50%** for Co-Location submitted since the start of 2023.

This shift, and what we forecast to be as the continued shift over at least the next year while the conventional residential market is still slow in London, is not a complete surprise given the nature of these developments. The transient nature of the rental products lends itself well to being built within the same development (especially the vertical typology) as the permanency of any potential effect on tenant's amenity will be short-lived comparatively speaking when comparing to the conventional residential typologies. Of course, the residential developers of these schemes would argue that the Agent of Change principle has been fully considered and that there should be no impact on amenity due to the mitigation measures implemented and the ever-evolving techinology around these.

It will be interesting to watch how these schemes evolve over the next five years as the conventional residential market comes back, because it must come back, right?

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Studio Egret West
Client: Precis Advisory, Access Self Storage

Howells viewpoint: Orchard Wharf (case study)

Located on the River Thames in Tower Hamlets, Orchard Wharf comprises 1,365 student beds, 207 affordable homes, and a new industrial facility of 8,000 sq m with direct access to the river.

The project has arisen out of its ideal location for both industrial/ distribution uses and mixed-tenure living at density. This presents myriad challenges in terms of design and placemaking, and has required innovative solutions.

Orchard Wharf delivers on its industrial purpose through the provision of a logistics warehouse, which will initially be operated by Thames Clipper as a sustainable distribution hub, revitalising the river as a clean transport route into the heart of the capital, and removing significant numbers of heavy goods vehicles from the road network. A long-term, sustainable solution for the capital.

Alongside this, the homes will accommodate a significant population of around 2,000 people – adding to the growing residential neighbourhood on the Leamouth Peninsula, which includes London City Island and Goodluck Hope.

Creating an environment that accommodates large numbers of people and goods vehicles, and is attractive, safe and convenient, was therefore fundamental to the design response.

The strategic approach to the project is to distribute residential entrances and cores around the three 'public-facing'' sides of the warehouse volume, leaving its internal clear span uninterrupted, and its 100m-long river-facing elevation clear for wharf access. In this way, the perimeter of the warehouse is animated as much as possible through active ground floor uses, avoiding the typical prevalence of dead frontage associated with industrial buildings.

Safe management of vehicles is achieved by providing direct access to the centre of the warehouse from the access road, making it highly legible and allowing for turning and lay-by space within the warehouse itself, rather than on the public highway.

The residential journey thereby avoids direct conflict with wharf operations, with each entrance lobby providing lift access up to residential floors. Apartments occupy the first few floors of the wharf volume facing outwards, to increase a sense of residential street character and natural surveillance over the public realm.

The student entrance and amenity areas are consolidated on the north side of the building, closest to the transport network and providing a cascading sequence of social spaces that lead up to the shared rooftop gardens.

The enormous volume of the wharf box presents a fantastic amenity offering for all residents. Around 14 metres above ground level, the roof provides 0.5 ha of south facing gardens overlooking the Thames.

With the consolidation of PBSA accommodation to the north, the affordable homes take the prime position on the riverside, book-ending the wharf, and enjoying wide open views to the river and adjacent landmarks, including East India Dock Basin and Trinity Buoy Wharf.

Ultimately, the objective of Orchard Wharf is to successfully integrate three distinct user groups across its industrial and residential components. In doing this, it creates unique opportunities out of challenges, and provides a valuable example for future Co-Location developments on similar edge-of-urban sites, and at a scale and density that delivers much needed industrial space and homes.

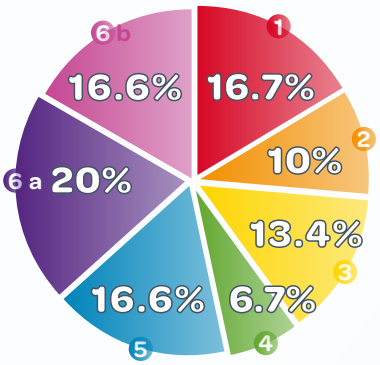
William Poole
Partner
Howells

Section 6: Sustainability

What impact does the Co-Location of employment and residential uses have on the sustainability of a scheme?

While there are some potential conflicts between industrial and residential development, such as noise, traffic, and air pollution, there are also many potential synergies that can deliver vibrant and sustainable mixed-use communities.

PTAL Ratings



Supporting sustainable travel patterns

A key benefit of Co-Location schemes is that they are mixed-use developments which can deliver a wider range of facilities within walking distance of where people live and work. Over half of the PBSA Co-Location schemes coming forward in London combine residential and industrial uses with some kind of retail or community use, reducing the need for people to travel. Co-Location schemes can also significantly improve the permeability of sites, particularly sites which were previously heavily industrial. For example, the proposed Neasden Goods Yard development in Brent plans to convert a purely industrial site into a mixed-use development with extensive public realm improvements, and even includes safeguarding of land for the provision of a foot/cycle bridge towards Wembley. In this case, the proposed scheme will help to significantly enhance the accessibility of the area for the wider community.

Public transport accessibility is key to supporting the more sustainable travel patterns. Good public transport connectivity is vital for most PBSA schemes, given that most students in London will not own a car. Such public transport connectivity is not usually such a high priority for industrial sites which are typically car-centric with limited options for staff to commute using public transport. Therefore, the Co-Location of PBSA with industrial sites may offer the benefit of improved public transport options for staff commuting to work. This theory is supported by Public Transport Accessibility Level (PTAL) ratings. A PTAL rating is a measure of how well a location is connected to the public transport network, ranging from 0 (very poor) to 6b (excellent). Around 55% of the PBSA/ Co-Living Co-Location sites have a PTAL rating of 4 or above (considered 'high accessibility'), with one site achieving the highest PTAL rating of 6b.

One challenge that needs to be managed on Co-Location schemes is the potential conflict between industrial and residential movement, particularly where industrial vehicle movement may compromise the safety of pedestrians and cyclists on or in the vicinity of the site. This is a risk that can usually be managed through careful site design. For example, at Park Royal Road East & West, plans have been revised to allow separate vehicular access to the service yard away from the main pedestrian entrance, and to ensure that PBSA refuse vehicles do not enter the light industrial service yard.

Average residential carbon reduction:

61% CO_2

Average commercial carbon reduction:

36% CO_2

Carbon emissions

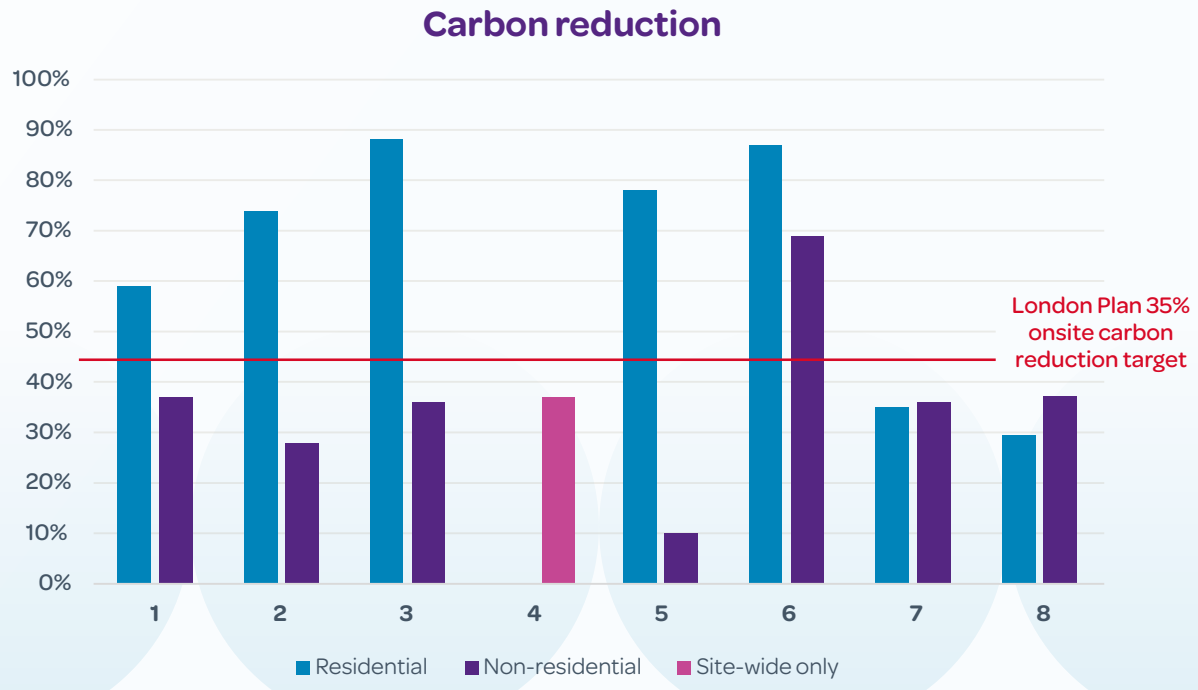
The London Plan aims to deliver zero-carbon development, with a target to achieve a 35% reduction over Part L 2021 onsite, with an energy efficiency contribution of 10% for residential development and 15% for non-domestic development.

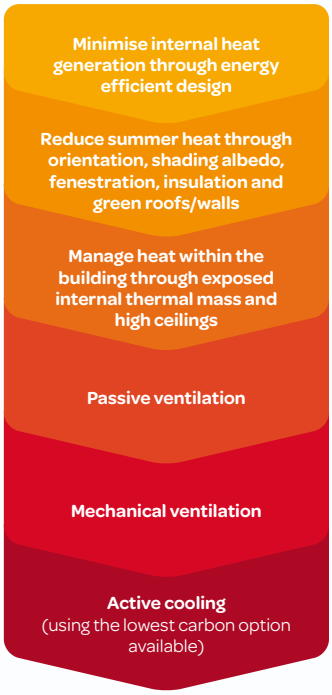
All of the PBSA Co-Location schemes coming forward achieve at least a 35% improvement of Part L, with several schemes achieving a carbon reduction of over 70%.

- Average residential carbon reduction – 61%
- Average commercial carbon reduction – 36%

However in most cases there is significant variance in the carbon performance of the residential and non-residential elements, with residential uses typically performing much better than the commercial element of the scheme, and some commercial uses falling below the target 35% improvement set by the London Plan.

Where carbon data for a Co-Location scheme is reported on a site-wide basis, it is important that higher performance in one use class is not used to mask lower levels of performance in the other. This is particularly true for PBSA Co-Location schemes, where energy performance tends to be very strong due to the operational cost savings that can be achieved once the development is occupied.





Overheating

Overheating is a significant climate risk for London, with projections indicating a rise in the number of days per year which could lead to increased heat-related deaths and health issues. PBSA development is particularly high-risk due to being generally dense development with high occupancy.

London Plan Policy SI4 requires new development to reduce the potential for overheating in accordance with the **cooling hierarchy**, which prioritises the use of passive cooling measures to ensure that buildings will be better equipped to manage their cooling needs while also reducing reliance on active cooling systems, minimising associated energy use and carbon emissions. A risk with Co-Location development is that noise associated with industrial uses may require windows to be kept shut for acoustic purposes, limiting the potential to rely on natural ventilation to mitigate overheating.

While the majority of the PBSA Co-Location schemes in London do suffer from some form of noise constraint, these are mostly due to wider noise sources such as railway lines, traffic, and surrounding uses, which are typical of urban development. In some cases, noise issues related to the proposed on-site industrial uses are proposed to be managed through mitigation measures such as buffer zones, acoustic screening, setting of appropriate noise limits, and restrictions on hours of operation. Some of these management measures may be an issue for some industrial occupiers, particularly those that require 24/7 operation, and may limit the types of commercial occupants appropriate for Co-Location developments.

Health & Wellbeing

A key challenge for Co-Location development is ensuring that industrial activities do not negatively impact residential health, wellbeing and amenity. The decarbonisation of power and electrification of technologies and process which use fossil fuels will help to significantly reduce the air-quality impacts of industrial development, making the Co-Location of residential and industrial uses increasingly feasible for a wider range of industrial uses.

Another factor which is known to significantly benefit health and wellbeing is green space. Green space and high-quality landscaping are typically a higher priority for residential development compared to industrial. This is reflected by London Plan Policy G5, which sets an Urban Greening Factor (UGF) target of 0.3 for commercial schemes, and a higher target of 0.4 for residential or mixed-use schemes. Data suggests that PBSA and Co-Living, Co-Location schemes in London are not skimping on green space provision. The schemes coming forward achieve an average UGF score of 0.45, with one development achieving a score as high as 0.52.

Summary / Conclusion

Co-Location schemes can support the development of vibrant mixed-use communities that offer high-quality public realm and a greater variety of services and amenities within walking and cycling distance of where people live and work. Decarbonisation is supporting cleaner industrial practices, increasing the feasibility Co-Location for a wider range of industrial use classes.

Key risks that need to be managed include noise, overheating, and pedestrian and cyclist safety. These risks need to be managed to ensure they do not impact the amenity of residents, but also to ensure that the proposed mitigation measures do not impose unreasonable burdens on the business operations of industrial tenants.

Finally, the energy demands of residential and commercial uses is very varied, and attention needs to be paid to ensure that high performance in one use class does not mask lower performance in the other.

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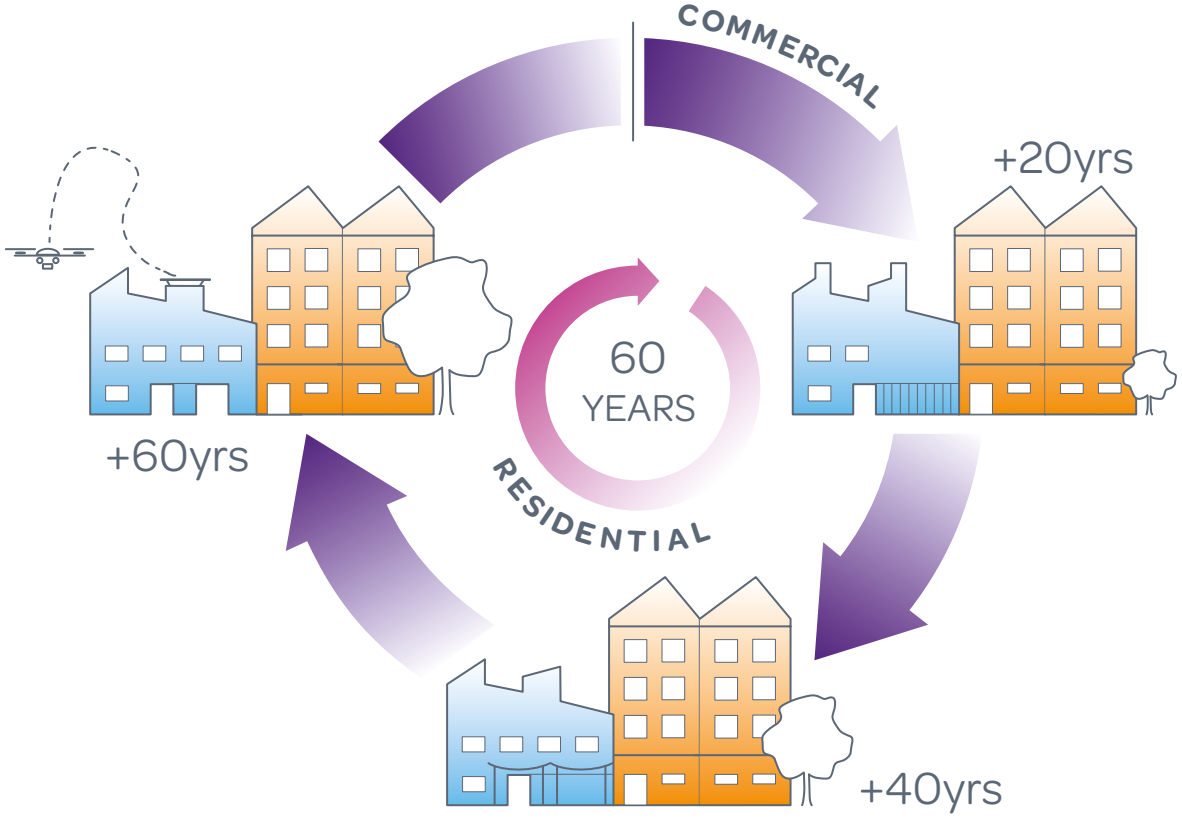
Client: Parkside Investments



GTH viewpoint: Co-Location - Designing for difference

A challenge to Co-Location is that most developers specialise in either commercial or residential projects. This makes sense, as both require expertise, particularly in financing and exit strategies. For example, a Housing Association acquiring a development may not wish to manage commercial or industrial space, as it potentially falls outside their expertise and charter. Likewise, commercial/industrial operators rarely manage residential properties.

To address this, Co-Location developments must be designed with operational separation – significantly impacting the architectural design. Each component should function independently while remaining part of a cohesive whole.

In addition, a critical commercial consideration is the differing lifecycles of these spaces. Residential buildings typically have a lifespan of around 60 years, requiring only routine maintenance and upgrades during this period. In contrast, commercial/industrial spaces generally have a lifecycle closer to 20 years, necessitating more frequent adaptation to evolving technology, work patterns, and environmental requirements.

This disparity means commercial/industrial spaces must be designed for periodic rejuvenation without negatively impacting the residential component. This requires a clear separation in servicing strategy, spatial planning and access - thus supporting long-term adaptability and ensuring that one function does not disrupt or stymie the other during a lifecycle refresh.

While this may add to initial capital costs, it provides a competitive advantage by enabling development where others see barriers. Thoughtful design and meticulous co-ordination are essential to unlocking the full potential of co-located developments – but the commercial and planning gains can certainly make the additional effort worth it.

Karl Taylor
Director
GTH

Section 7: Economic Benefits / Delivery

For the first time, our report has undertaken detailed economic modelling to quantify the substantial economic benefits associated with the capital's current pipeline of Co-Location schemes. This in-depth analysis provides concrete figures on job creation, economic output and total residential capacity that these developments are poised to deliver across London, offering a more comprehensive understanding of Co-Location's true economic potential beyond the headline housing and industrial floorspace figures.

The current pipeline of Co-Location schemes is expected to bring substantial housing gains to London, with the provision of homes for around 85,700 residents including over 6,500 students. The policy for no net loss of industrial floorspace will result in an uplift of 125,000 sq m of employment floorspace (c.365,000 sq m in total) which is an 53% increase on the current position across the sites.

A total of 8,500 direct Full Time Equivalent ('FTE') jobs are estimated to be supported in a variety of uses from retail to office to various industrial and logistics uses, creating an uplift of around 3,300 jobs or an additional 63% compared to the current position.

Noting the larger volume of employment floorspace and greater variation in sectoral uses, there is an estimated uplift in economic productivity of 68%, with economic output estimated to increase by £290 million a year.

Key figures and assumptions

Over 6,500 living in PBSA

320 living in Co-Living schemes

Over 85,700 residents

C.78,900 living in residential properties

Over **8,500** gross direct jobs per annum supported across all Co-Location schemes

Generating **715** million GVA output per annum across all Co-Location schemes

Over **365,000** sq m total employment floorspace

Uplift of **c.3,300** gross direct jobs per annum

63% Uplift

Generating **c.291 million** GVA output per annum

68% Uplift

Over **125,000** sq m of employment floorspace uplift

53% Uplift

* GVA figures don't take into account leakage, displacement or multipliers.
* Number of residents is calculated applying average household sizes per borough based on 2021 Census.
* Old Oak and Park Royal Development Corporation (OPDC) average household size has been calculated based on average household sizes for the boroughs of Brent, Ealing and Hammersmith & Fulham.

Assumptions

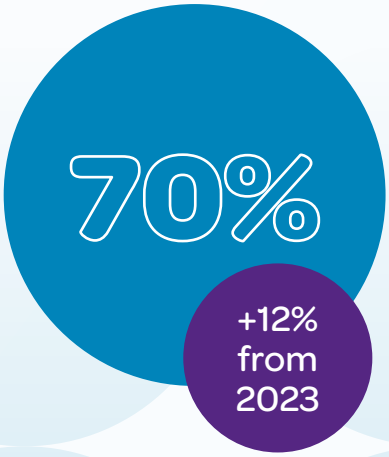
Use Class	Employment Density	Experian GVA per FTE category
E(g)iii	1 FTE per 47 sq m (Light Industrial)	Manufacturing
E(g)ii	1 FTE per 50 sq m (R&D)	Professional Services
E(g)i	1 FTE per 12 sq m (Office)	Professional Services
B1c	1 FTE per 47 sq m (Light Industrial)	Manufacturing
B2	1 FTE per 36 sq m (Industrial and Manufacturing)	Professional Services
B8	1 FTE per 70 sq m (Last Mile)	Transport & Storage
Sui Generis	1 FTE per 90 sq m (Lowest density retail warehouse)	Utilities*
	1 FTE per 90 sq m (Lowest density retail warehouse)	Transport & Storage
A1	1 FTE per 17.5 sq m (average density for retail)	Retail

Delivery

Positively, the substantial economic benefits outlined above are increasingly likely to be realised, as our analysis shows encouraging momentum in the delivery of Co-Location schemes across London.

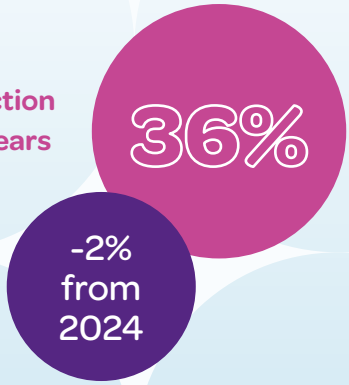
In terms of delivery, 70% of approved schemes are now showing signs of implementation (a 12% increase compared to last year's report). This suggests that there are a number of additional sites which benefit from planning permission and are now on the path to becoming completed, occupiable developments.

Around 36% of the approved schemes are showing signs of construction starts on site. This is a 2% decline from 2024, which reflects the positive growth in the number of approved – but as yet unimplemented – schemes. Significantly, we understand that a number of schemes have either been completed or are due to complete imminently, despite the continued economic and viability pressures experienced by both the real estate industry and wider economy over the last 12-24 months.



Schemes showing signs of activity / on-site delivery (i.e. discharge of planning conditions/obligations or construction-related)

Schemes where construction (inc. demolition work) **appears to be underway**



Conclusion

Conclusion

After a period of relative inactivity the year before, 2024 saw an uptick in the number of planning applications for Co-Location schemes as well as a striking shift in their typological make-up, with a record number providing alternative 'living' products – such as PBSA and Co-Living – alongside industrial, warehousing and related employment uses.

Notably, of the 17 Co-Location schemes submitted over the past two years, eight include an element of PBSA and/or Co-Living, whereas nine consist entirely of traditional residential accommodation (Class C3). Alternative 'living' products have therefore featured in nearly half of recently submitted Co-Location schemes. This is rapid growth considering that only one GLA-referable PBSA scheme – and no GLA-referable Co-Living schemes – had been submitted prior to 2023.

In the challenging economic climate of recent years, alternative 'living' products such as PBSA and Co-Living – which allow developers to retain control of the asset – have emerged as a more favourable means of delivering returns from land as opposed to traditional for-sale residential housing. However, the growing presence of PBSA and Co-Living within the Co-Location pipeline may also reflect the fact that these uses arguably make for more natural partners for industrial uses than conventional residential development. With their shorter tenures and typically younger, more mobile and noise-tolerant demographics, PBSA and Co-Living uses may present a relatively lower risk of conflict with industrial and logistics operations, while their professional management structures may enable speedier resolutions to any amenity-related issues.

Crucially, PBSA and Co-Living are also helping to shore up Co-Location's contribution towards housing delivery in London. When we include live planning applications and convert Co-Living and PBSA units to their housing equivalents (at ratios of 1.8 and 2.5 units per home, respectively), Co-Location schemes are projected to deliver 31,362 new homes. This represents the highest total recorded in the four years since the first edition of our report.

If approved and implemented, the current pipeline of Co-Location schemes has the potential to deliver 363,916 sq m of floorspace. This represents an increase of approximately 125,000 sq m (or 53%) compared to the existing quantum of industrial floorspace on these sites (238,535 sq m) – the greatest proportionate increase recorded to date, and an indication that Co-Location schemes are working harder than ever to meet the capital's industrial land needs.

Promisingly, the above projections appear to be feeding through to actual delivery, with more approved schemes than ever (70%) showing some signs of implementation (i.e. through the discharge of planning conditions or, in 36% of cases, through construction-related activity). This is a welcome development, particularly in light of the significant economic benefits that would be generated if the current crop of Co-Location schemes were to be built out. These benefits include, notably, the delivery of homes for over 85,700 residents, the creation of 8,500 gross direct jobs per annum, and the generation of £715 million GVA output per annum.

In summary, the above suggests that Co-Location is – and, with publication of the London Plan Consultation Document, is likely to remain – central to the capital's strategy for addressing its industrial and housing needs. It remains to be seen whether the Government's focus on accelerating housebuilding will result in an uptick in the number of Co-Location schemes coming forward, or if this will tilt the balance back toward traditional residential uses within Co-Location schemes, tempering the recent growth in alternative 'living' products seen in recent years. If there is one key takeaway from this year's research, however, it is that the growing diversity of 'living' typologies has fundamentally re-framed what we talk about when we talk about Co-Location, with the average 'beds-over-sheds' scheme now almost as likely to comprise 'PBSA over B2/B8' as it is 'C3 over E(g).'

About Turley

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For further information contact:

Planning

Alex Christopher
Director, Head of Planning London
alex.christopher@turley.co.uk

Catriona Fraser
Director, Planning
catriona.fraser@turley.co.uk

Christopher Schiele
Director, Planning
christopher.schiele@turley.co.uk

Samuel Brown
Associate Director, Planning
samuel.brown@turley.co.uk

Nick Edwards
Planner
nick.edwards@turley.co.uk

Heritage

Marc Timlin
Director, Head of Heritage and Townscape
marc.timlin@turley.co.uk

Sustainability and ESG

Snigdha Jain
Director, Head of ESG
snigdha.jain@turley.co.uk

Barny Evans
Director, Sustainability and ESG
barny.evans@turley.co.uk

Lizzie Bolton
Senior Consultant, Sustainability and ESG
elizabeth.bolton@turley.co.uk

Strategic Communications

James Simondson
Director, Strategic Communications
james.simondson@turley.co.uk

Economics

Amy Gilham
Senior Director, Economics
amy.gilham@turley.co.uk

turley.co.uk
linkedin.com/company/turley

Turley