

Euston Area Regeneration Economic Impact Assessment

A report from Metro Dynamics to the London Borough of Camden

February 2024

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Section 1: Executive Summary

Setting the scene: A Euston Station for the 21st Century

Euston Station's development is a once-off chance to deliver transformational economic benefits for Euston, London and the UK. A locally-led, commercially-focused regeneration underpinned by inclusive growth objectives is the best way to capitalise on the opportunity at hand.

Euston Station opened in 1837 as London's first inter-city rail terminal. Occupying a prime city-centre location in the London Borough of Camden, Euston was designed as the UK's gateway to the midlands and north, connecting London with Birmingham, Manchester, Liverpool and more.

To this day Euston remains the UK's busiest inter-city rail terminal, and it is integral to London's transport system and the national rail network. However, the station and its immediate surroundings are unattractive, challenging to navigate and generally uninviting, resulting in the station being widely regarded as unfit for purpose given its significance.

Euston Station is evolving, as is the area around it. A new station is being built to accommodate High-Speed 2 (HS2) services to Birmingham and millions more passengers every year. This is a transformational investment in Great Britain's rail network with Euston Station at its heart. Nonetheless, uncertainties surrounding HS2 and the Network Rail station redevelopment pose challenges to the realisation of this vision.

Euston's redevelopment is about much more than transport. Recognised as the last major station redevelopment opportunity in central London, Euston's regeneration holds the potential to attract billions of pounds in global private sector investment, support thousands of jobs in the local area's world-leading life sciences and technology clusters, spur inclusive growth in the communities around Euston (which are some of inner-London's most deprived), and become one of the most attractive mixed-use developments in London.

The forthcoming Euston HS2 terminus alongside a renewed Network Rail station could play a vital role as a local and global investment magnet, contributing significantly to economic growth and prosperity throughout the UK. Enhanced connectivity between Knowledge Quarters in London and Birmingham would allow for greater knowledge sharing, as envisaged by the Government's recently published Life Sciences Vision, to create one part of a spine of knowledge connected to the Midlands and contributing to national levelling up. Ensuring that HS2 terminates at Euston is essential to the efficacy of the overall programme and integral to realising the benefits of the entire investment.

As is typical for regeneration projects of Euston's scale, delivery is highly complex. Thousands of people live around the site, and throughout construction Euston Station must continue to operate as a major transport hub. Many partners are involved - each with overlapping but different roles and objectives - not least Camden Council, HS2 Ltd, DFT, Network Rail and Lendlease as Master Development Partner.

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Construction of HS2 at Euston began in 2017 after years of planning. But in March 2023 rapidly escalating costs and ongoing design uncertainties led Government to announce a two-year construction pause to allow for a review of how to proceed. The context continues to evolve: in October 2023 Government took the decision that only the London to Birmingham phase of the original HS2 line will be built. Euston Station is likely to be smaller, with six platforms down from an original 11. Responsibility for delivery is expected to be handed from HS2 Ltd to a new Development Corporation. Further, delivery will now be contingent on significant private investment.

Despite the uncertainty and complexity of delivery Camden Council and partners are committed to seeing through this transformative opportunity. Camden Council is ready to lead development at Euston that delivers for the community and the country. This means the council, key partners and the local Euston community having not just seats at the table but the power to lead and make the vision for Euston - and the life-changing opportunities that it will provide - a reality. The Council set out its ambitious vision for the area, in the Euston Area Plan back in 2015, envisaging a comprehensive approach to development and the delivery of thousands of new homes and jobs above and around the station to provide opportunities for both the local community and capitalise on the growing Knowledge and life science economy here.

A substantial amount of work has been undertaken to maximise the land around and above Euston station, both for the HS2 station and Euston conventional station, since the appointment of Lendlease as the development partner in 2018. The scale of the Euston Area program and its ambitions, for a site that has largely remained a construction site for 10 years, can bring about a transformative step change for the broader city, introducing place-making benefits and enhancing prosperity throughout.

Purpose of the study

In September 2023, Camden Council commissioned Metro Dynamics to produce an Economic Impact Assessment and accompanying strategic narrative for the Euston Area regeneration.

Notwithstanding work to develop a broad Growth Strategy for Euston back in 2016, this work is the first time that an attempt has been made to fully quantify and articulate the strategic impact and economic benefits of Euston's redevelopment on local, London-wide and national scales. The purpose is to provide a coherent view of the scale of the opportunity at a particularly urgent and important juncture for the project, in light of Government's decision that in order for the Euston Station HS2 terminus to be completed the project will need to attract substantial private investment.

This document is an integral part of the narrative report, provided as part of this commission, and aims to provide a comprehensive understanding of the transformational economic and place-making opportunities associated with the Euston station and wider area redevelopment. The study takes into account the evolving landscape and collaborative efforts with partners, supporting the Euston Area's future development.

Background and approach to the work

This document presents the Economic Impact Assessment (EIA) for the Euston Area Regeneration and it provides the most comprehensive estimate of the potential of Euston's Regeneration according to the current projections of the scale and scope of development. The assessment is built upon core assumptions and acknowledges the existence of underlying uncertainties:

This study recognises the inherent uncertainties and the political sensitivity surrounding future government decisions, the level of government investment in the broader HS2 programme and the Euston station development, and the potential political instability that may arise from forthcoming national and London Mayoral elections.

Originally, the plan entailed substantial government subsidies for investment, with Government providing financial support for the over-station enabling investment. However, evolving priorities have led Government to explore solutions requiring a minimal public contribution to investment. The expectation is that private investment solutions and alternative financial mechanisms should be explored to cover the station investment and enabling costs, and address viability in the wider Euston Area redevelopment.

This study also acknowledges confidentiality constraints associated with the ongoing potential masterplans and scenarios development. These include impacting aspects such as the scale of residential and commercial development and the level of developer contribution and profit, which are yet to be confirmed.

The lack of clarity, especially in the October 2023 government announcement proposing 10,000 homes on the development site raises questions about the basis for such figures. The existing Euston Area Plan envisages the delivery of a mix of homes and jobs largely focused on development potential above and around the station. The complexity of building above and around the stations, coupled with restrictions on building height arising from London protected lines of sight under the London View Management Framework (LVMF) planning regulations, impose limitations on potential development in the area. There is a clear preference for a mixed-use regeneration scheme, emphasising the delivery of houses and affordable homes, coupled with retail spaces, commercial areas with a Knowledge Quarter emphasis, and open spaces catering to community, residents, and visitor needs.

All the figures are derived from what has been known by partners as the **'Workstream 2' scenario**¹ which is based around a reduced station footprint and integrated delivery of HS2 and NR concourse broadly based on work in response to the Government reset of HS2. This scenario represents the most up-to-date information available in alignment with recent

¹ Partners are adopting diverse development approaches, with Lendlease, as the masterplan development partner, presently at the forefront of the Workstream 2 scenario. The goal is to harmonize the distinct approaches being developed by Network Rail and HS2, reaching an agreement on the optimal solution. Therefore, it is acknowledged that the figures presented in this document as part of the Workstream 2 scenario are not definitive, yet they offer a valuable perspective on the potential of the Euston regeneration.

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government updates. It encompasses three key development areas: the Adjacent Station Development (ASD), adjusted to assume six HS2 platforms in line with the government's announcement; the Northern Approaches development; and a comparatively minor element of Over Station Development (OSD)².

The Workstream 2 scenario, on which this EIA is based, is one of a few alternative scenarios being developed by partners, and its development assumptions are regarded as the most realistic scenario presented thus far. As part of this study's sensitivity analysis, we will explore various potential developments and their impacts.

Given the above considerations, the Economic Impact Assessment (EIA) findings presented in this document should not be interpreted as definitive predictions, but rather as potential outcomes based on the most plausible scenario and assumptions at the present time.

Additionally, this study acknowledges the modelling currently being undertaken by the Department for Transport (DfT), as part of the wider HS2 Phase 1 Business Case reassessment, and by Transport for London (TfL) in economic modelling associated with the underground and bus network's capacity and access upgrades, linked to the station and wider area development.

Close coordination with transport partners is imperative to avoid duplicating benefits resulting from the Euston Area redevelopment and those arising from the new station, rail provisions, and improved public transport network accessibility.

For these reasons, the outputs and impact figures presented in this study are specific to the Euston Area regeneration program alone. Linked to this, the investment costs presented here are also net of the investment related to the conventional station redevelopment and new station development, as assessed by DfT and HS2, and underground network and bus access upgrades, as appraised by TfL.

Ultimately, this EIA has been developed by Metro Dynamics, with the involvement of partners from Camden Council, GLA, Lendlease, the HS2 partnership and DfT. These partners have played a crucial role in agreeing a core scenario and the likely development outputs and outcomes which have helped shape this study.

Nonetheless, it is important to note that this study ultimately reflects Metro Dynamics' interpretation of a complex scheme, and that individual partners may not agree with all of the assumptions contained herein. However, whilst recognising the inherent uncertainties and confidentiality issues associated with this investment at this point of time, we feel that this EIA provides a strong understanding of the economic potential of regeneration.

² Specifically, Workstream 2 has a smaller OSD component compared to the most recent masterplan developed known as the '**T2**' Scenario. The initial 'T2' Scenario masterplan developed by landowners featured a significantly larger OSD development, resulting in higher enabling costs.

Headline findings from the EIA

Initial findings from this study, complemented by the compelling and robust narrative being developed as part of this work, highlight the significant opportunity the Euston Area's development presents for Camden, London, and beyond. The scale of the program and its ambitions, addressing a site that has predominantly been a construction area for a decade, has the potential to bring about a transformative step change for the entire city, fostering place-making benefits and enhancing prosperity throughout.

Figure 1. Euston Regeneration Headline Impact Figures

Current planned Euston Area Regeneration Investment

£4.2bn of private and public investment, of which at least **£2.7bn** in Foreign Direct Investment (FDI) to deliver a diverse and inclusive mixed-use development, creating...

UK GROWTH



470,000 sqm high quality commercial development



Up to 30% of commercial space designated for the life sciences sector

INCLUSIVE PLACEMAKING



2,100-2,500 homes, including 750-1,200 affordable homes



33,000 sqm high quality retail space ¹



Open space with new green spaces, walking and cycling routes

CONNECTING OPPORTUNITY



New HS2 and conventional rail terminus, supporting national connectivity



Improved public transport connectivity

50,000 construction job-years,² with a target for at least 20% of construction jobs to be recruited locally.

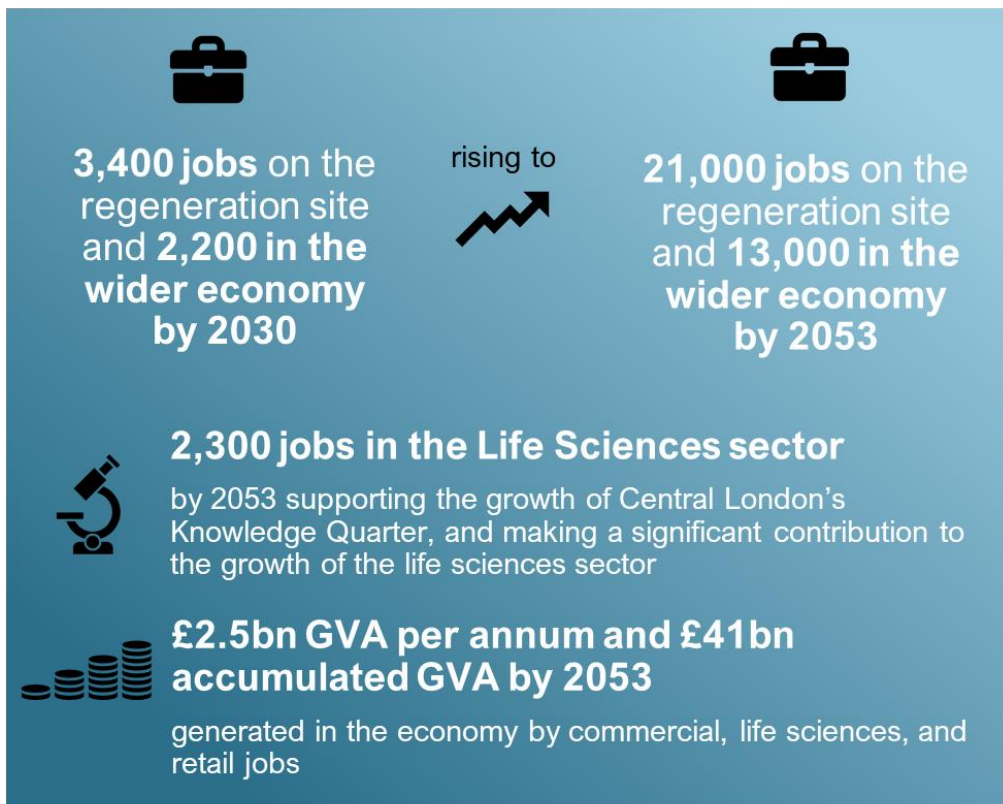
1,300 apprenticeships and thousands of work placements over the development period.

£3.4bn GVA generated from construction activity by 2053

¹ The amount of retail space to be provided as part of any development is subject to an RIA.
² Construction job-years = construction worker working for one year. Ex. 1 construction worker working for 10 years = 10 job years.

Figure 2. Euston Regeneration Headline Impact Figures

BENEFITS FOR THE UK ECONOMY



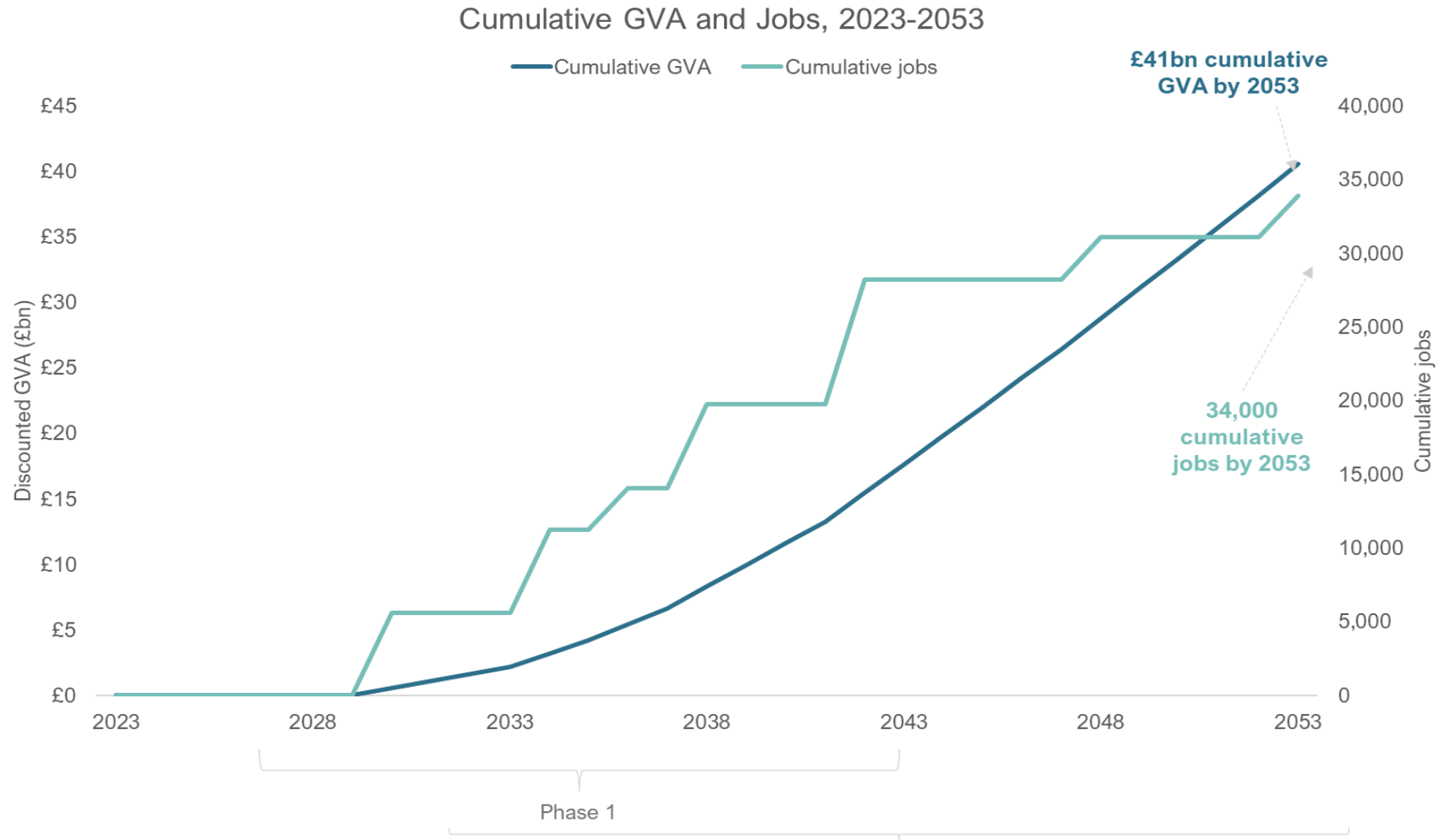
BENEFITS FOR THE EUSTON AREA



PUBLIC FINANCE BENEFITS

Benefits presented in gross discounted outcomes (present value terms)
Source: Metro Dynamics Economic Impact Assessment

Figure 3. Cumulative impact on economic outputs and jobs



GVA has been discounted.

Jobs are all direct, indirect and induced jobs, excluding construction jobs.

Section 2: Unlocking Euston’s potential through regeneration

This section presents a short summary of the rationale for investment in Euston Station’s regeneration. Based on the findings of the Economic Impact Assessment, this section also considers the wider context for development.

A full description of the rationale for investment is set out in the main Economic Rationale report which this EIA accompanies.

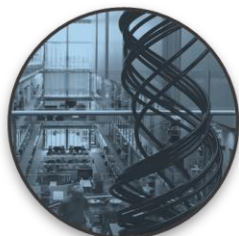
Euston Station’s development is a once-off chance to deliver transformational economic benefits for Euston, London and the UK.

Euston station’s redevelopment is about much more than readying the station for HS2. Development is in fact a singular opportunity for large-scale regeneration in central London, harnessing the distinct advantages of Euston’s strategic location, large developable area, and exceptional connectivity to deliver benefits beyond the transport improvements of HS2.

A locally-led, commercially-focused regeneration approach is the best way to capitalise on the once-in-a-lifetime opportunity Euston’s redevelopment presents.

The rationale for investment in a locally-led, commercially-focused regeneration of Euston Station is about:

UK GROWTH



Supporting growth throughout the 21st century in London’s world-leading Life Sciences and Technology clusters, which are concentrated in the area around Euston known as London’s Knowledge Quarter.

INCLUSIVE PLACEMAKING



Delivering regeneration of this central London site in a way which supports growth and extracts genuine benefits for local communities and businesses, while creating a station which befits Euston’s significance as the UK’s busiest inter-city rail terminal.

CONNECTING OPPORTUNITY



Supporting national connectivity, linking knowledge clusters closer together, and delivering the intended benefits of the substantial investment already made in HS2 and Euston Station’s redevelopment.

Cutting across these three primary themes are **inclusive growth objectives**, which are built into the station’s design and approach for delivery, ensuring that benefits flow to local communities.

UK GROWTH

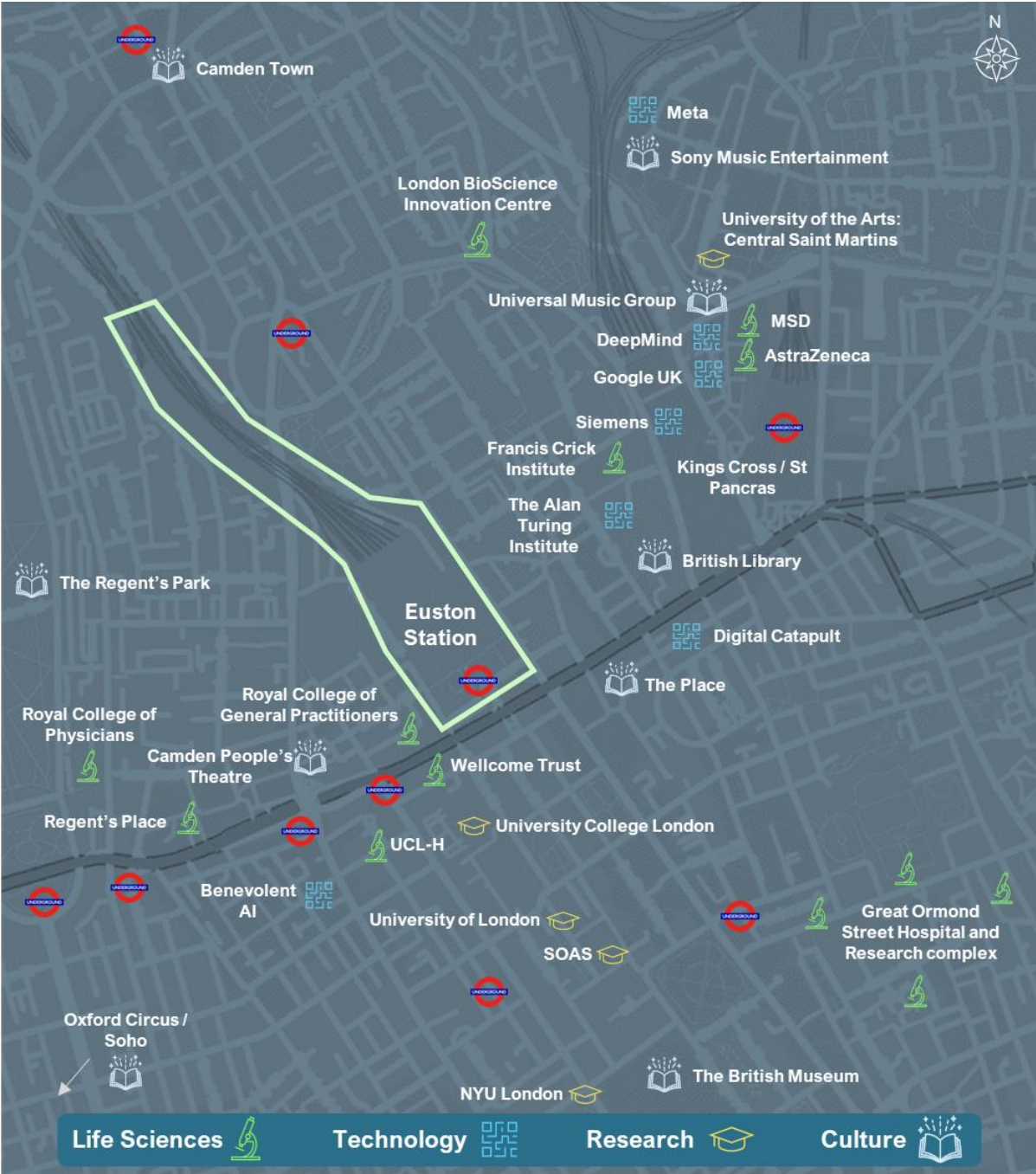
Euston lies in the middle of a square mile area containing arguably the densest concentration of life science and technology-based organisations anywhere in the world. Within a few hundred yards of Euston station are the Francis Crick Institute, UCL,

Metro—Dynamics

Google’s European HQ, DeepMind, Astra Zeneca, and 2,070 other high growth companies employing 60,000 people.

The 2018 Science and Innovation Audit (SIA) highlighted the importance of this area as an ‘incubator’ for the whole of the UK and a significant contributor to the wider levelling up agenda, in particular due to strengths in life sciences, AI and machine learning. And the Government’s recently published Science and Technology Framework recognises this area’s clusters as containing a portfolio of critical technologies that will be essential to the UK’s future prosperity.

Figure 4. Map of selected organisations and businesses around Euston Station

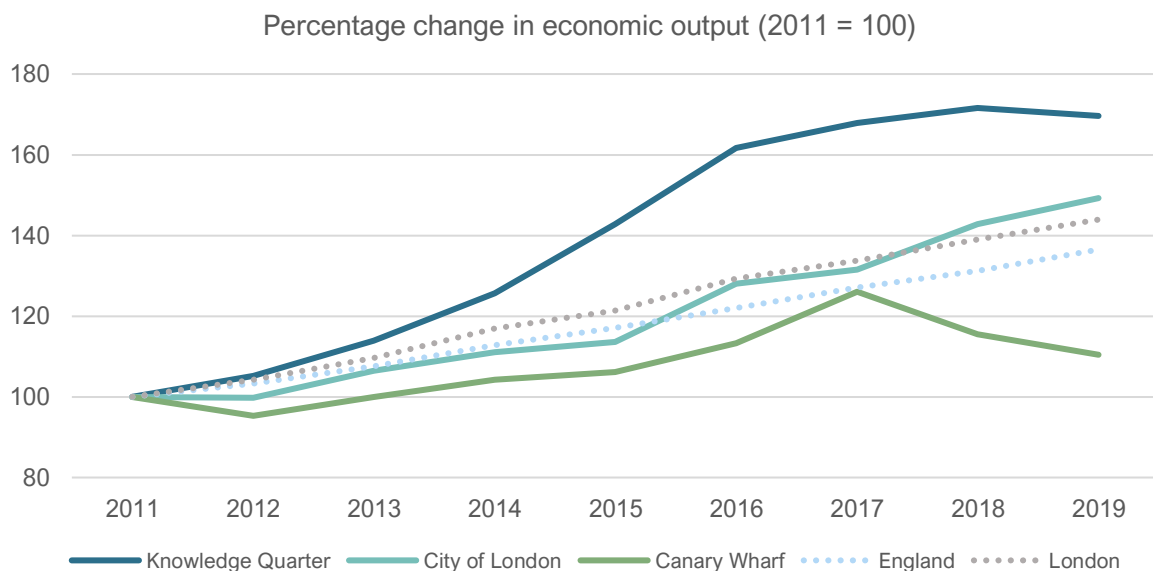


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Euston is where the UK’s new economy is taking shape. Driven by the concentration of highly productive, knowledge-based clusters in the area around Euston and Kings Cross known as London’s Knowledge Quarter, this area is quickly becoming more important to the UK economy than anywhere else. The area within one mile of Kings Cross contributed £35.2bn to the UK’s GVA in 2019, a larger contribution than Canary Wharf at £23bn and larger than many cities, including Manchester, Cambridge or Oxford.

Economic output in the Knowledge Quarter is growing faster than even the City of London, with economic output growing by 70% from 2011 – 2019 in the Knowledge Quarter compared to 49% in the City of London. Growth is set to continue as the area continues to develop and attract new major assets, including the new Moorfields Eye Hospital and a major expansion of the British Library in 2025.

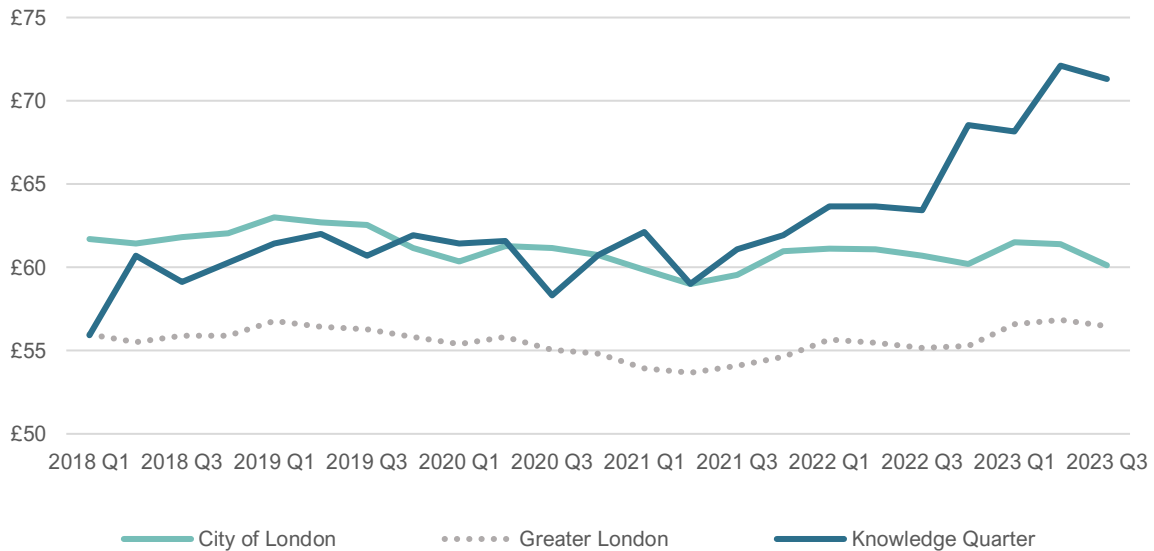
Figure 5. Indexed percentage change in economic output (nominal), 2011 – 2019 (2011 = 100)



The area’s strengths are its strategic location in the centre of London, its concentration of vital anchor institutions, and its exceptional connectivity – both within London, nationally and even internationally. These factors together result in the area being highly attractive to growing firms in knowledge-based clusters, which benefit from proximity to similar businesses and access to the best talent, which is drawn internationally to London. The end result is employment, innovation and economic growth which is good for the entire country and reinforces London’s international reputation as one of the world’s great cities.

For London’s Knowledge Quarter to be able to continue its successful trajectory as a major growth centre for the UK economy, the area’s lack of available commercial and laboratory space must be addressed. There is a severe shortage of real estate space to accommodate both current and predicted demand for life sciences and technology businesses, with a particularly acute shortage for fitted laboratory space. A recent British Land report found that in the ‘Golden Triangle’ of London, Oxford and Cambridge, vacancy rates for fitted laboratory space were just 1% in London and Cambridge and 7% in Oxford.

Figure 6. Rental prices (per sqf) for premium office space



Without additional space, the UK’s internationally competitive Life Sciences and Technology clusters will fall behind: the UK produces less space, at a slower rate of delivery, than global competitors. Ultimately this dampens growth and raises the chances of the UK losing out on internationally mobile capital and talent to Europe, Asia and America.

Conversely, the station’s redevelopment offers the chance to provide critical new commercial and laboratory space for these world class institutions to grow and attract further investment and to fully realise the potential here.

INCLUSIVE PLACEMAKING

Euston Station is one of the last major station regeneration opportunities in central London. The existing Euston Station is one of the UK’s busiest rail stations but is widely regarded as being unfit for purpose. This is a one-off chance to maximise the scale of opportunity through a locally-led, commercially-focused development.

Regeneration, done in the right way, can help reshape the Euston area as a vital new piece of central London, improving amenities and quality of life for the thousands of people who live locally and for station users. The station itself and the area around it is difficult to navigate and unattractive despite its prime location – qualities exacerbated by the paused construction works. Communities around the station, such as Somers Town to the east and Regents Park Estate and Drummond Street to the west, suffer because the existing station is a barrier to movement in the local area, dividing neighbourhoods and forcing pedestrians onto the extremely busy Euston Road. This is detrimental not only to local communities, who must put up with the negative impacts of the station’s poor design on the area’s permeability and general amenity, but is a drag also on the growth of the Knowledge Quarter, because it reduces the overall desirability of the area as a place to be.

Embedding inclusive growth in how development occurs can support residents to access skills and jobs, and ensure that communities benefit from years of disruption.

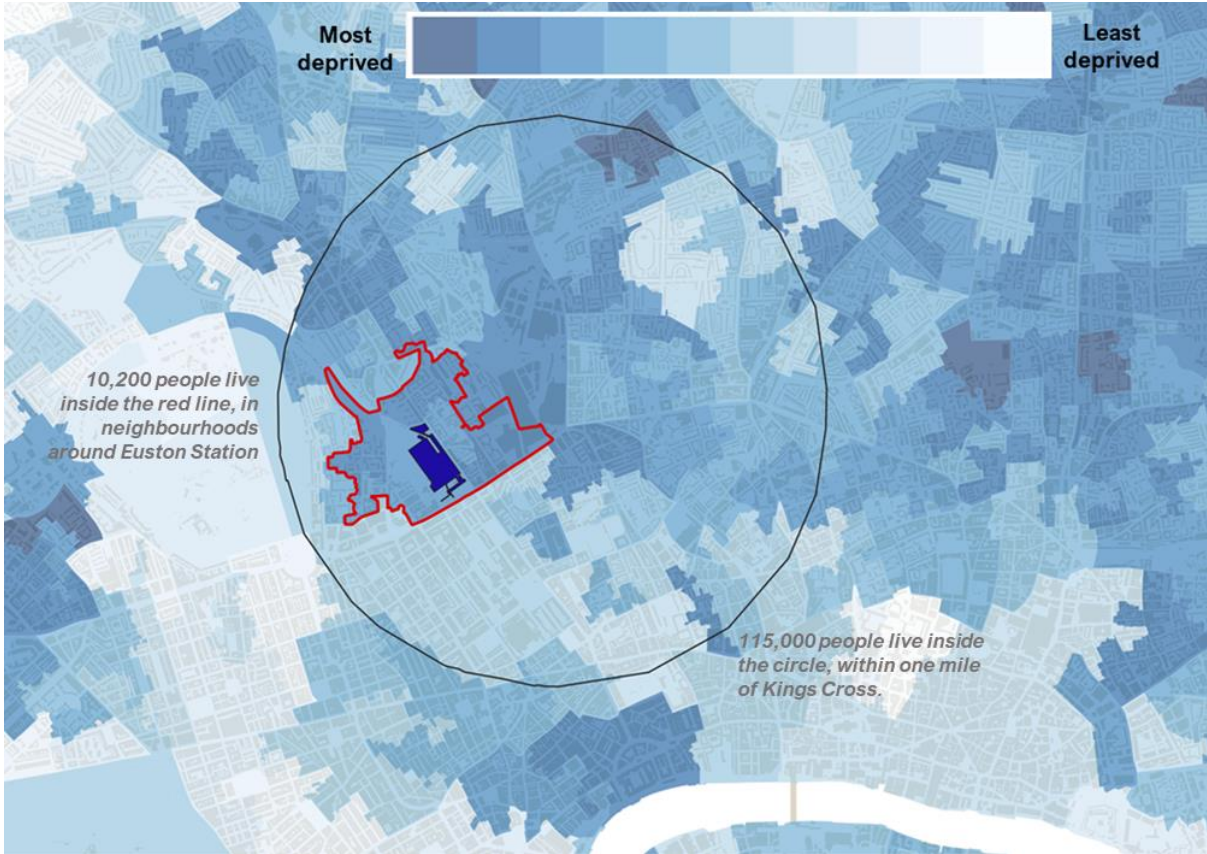
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The station’s redevelopment will bring local job opportunities to the area, including thousands of apprenticeships and work placements over the duration of construction. Local people will be supported to access these job opportunities via the newly opened Euston Skills Centre, situated on site and providing training in construction skills. Significant meanwhile use opportunities during construction will also benefit local communities, such as new green space, pop-up space for businesses, and art installations.

Regeneration can be a long-term model for spurring inclusive growth in a deprived urban area. London’s Knowledge Quarter is globally distinct from knowledge quarters in other cities because it has grown out of inner-London neighbourhoods that thousands of people still live in, such as Somers Town and St Pancras, rather than being a spatially distinct, non-residential area such as Kendall Square in Boston or the Cambridge Biomedical Campus. This fine-grained integration into Central London is an asset for the area, and the local community is integral in shaping the Knowledge Quarter’s character.

The residential neighbourhoods in the Knowledge Quarter are some of inner-London’s most deprived, with high rates of child poverty, high rates of worklessness and rising costs of living. A challenge and opportunity for the Knowledge Quarter is to ensure that its success genuinely benefits local residents, including making sure that the knowledge-based jobs in the area are accessible to local people. In the case of Euston Station’s development, this means working with the community now to raise aspirations, support skills acquisition and provide local employment pathways so that residents can access the high-skilled jobs Euston Station will eventually support.

Figure 7. Index of Multiple Deprivation (IMD), 2019



Euston’s regeneration can emulate and extend the success of Kings Cross’

redevelopment, but with a refined focus on ensuring regeneration delivers spaces and services which meet the needs of local communities as well as the wider public. Kings Cross’ redevelopment is widely regarded as a major success, transforming a previously run-down area into one of the most vibrant parts of London today. As well as transforming a vital piece of London’s urban fabric, regeneration has had an extraordinarily positive impact on local economic growth, with economic output in the area around Kings Cross increasing from £148m to £2.06bn between 2010 and 2019. This gives some sense of what is possible at Euston Station if regeneration is delivered in the right way.

Redevelopment is an opportunity to provide much-needed new homes in central London. The Euston area has a very high proportion of social housing compared to the Camden average. Hundreds of homes, mainly affordable, have been lost as a result of HS2. Engagement with local communities reveals that housing, particularly genuinely affordable good-quality housing, is most often a priority for both local communities and organisations in the Knowledge Quarter, who want good quality homes to be available in the area so they can attract internationally mobile talent. The delivery of new affordable housing around the Euston site is one of many ways the station regeneration can reap tangible benefits for the local communities which have been disrupted.

Figure 8. New homes which have recently been provided in the Euston area



CONNECTING OPPORTUNITY

National connectivity is at the heart of the Network Rail and HS2 programme. A central London HS2 terminus and upgraded conventional station are essential to the benefits of the HS2 and London North West Route. Without Euston, the enormous investment already made in HS2 will fail to fully deliver the programme’s intended benefits of faster connections, increased capacity, national levelling up, and reduced pollution and congestion.

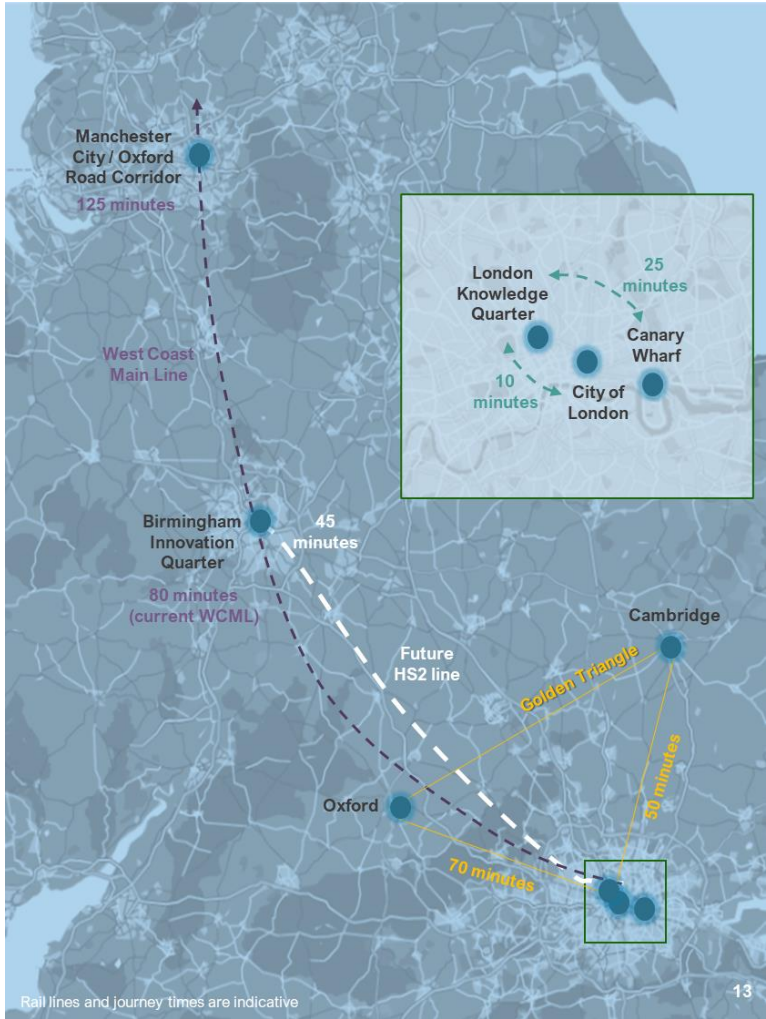
Metro—Dynamics

Through improved connectivity, a central London HS2 terminus and the redevelopment of Euston Conventional Station (RECS) will deliver benefits to Birmingham and beyond. Enhanced connectivity between Knowledge Quarters in London and Birmingham (where Curzon Street station is the southern anchor of the Birmingham Knowledge Quarter) allows for greater knowledge sharing, as envisaged by the Government’s recently published Life Sciences Vision, to create one part of a spine of knowledge connected to the Midlands.

HS2 will bring the centres of the UK’s two largest cities within 45 minutes of each other. Such close connectivity will foster better business collaboration and enable a greater number of workers outside London to access high-wage job opportunities , supporting national levelling up, spreading opportunity, and easing pressure on housing and infrastructure in the capital.

Development will reinforce the internationally renowned strength of the UK’s Golden Triangle – London, Oxford and Cambridge, due to direct connections to Milton Keynes. The Euston terminus also has the potential to support cluster development at Old Oak Common, strengthening this spine of knowledge and providing a major new growth centre in London.

Figure 9. Connections between Euston Station and knowledge clusters in other cities



Ensuring that HS2 terminates at Euston is integral to realising the benefits of the entire investment in HS2. Failing to do so will minimise the benefits of the remaining component of the scheme still being delivered – the connection from London to Birmingham via Old Oak Common. Though the transport benefits of the scheme are beyond the scope of this Economic Impact Assessment, the rationale for HS2’s investment with a central London terminus is that it will:

- **Reduce travel times:** bringing labour markets in the UK’s two largest cities closer together, with onward connections to Manchester and elsewhere.
- **Release network capacity:** Euston terminus will help release capacity for passengers and freight throughout the national rail network, and particularly on the West Coast Main Line, Midland Main Line, East Coast Main Line and East West Rail.
- **Levelling Up:** Widening access to knowledge-intensive, high-wage jobs in London, supporting national levelling up.
- **Reducing congestion and pollution:** HS2 will help to reduce congestion on roads. In doing so it will help to lower carbon emissions and cut pollution.

Old Oak Common will benefit from Euston Station being the ultimate London HS2 terminus. Once complete, Old Oak Common will be one of the busiest and best-connected railway stations in the country. Large-scale regeneration will also be delivered alongside the station at Old Oak West, including around 2.5m sqft of workspace supporting over 20,000 new jobs in a new commercial district. HS2 services will link Old Oak Common and Euston Station. Long-term plans for the use of commercial space at Old Oak Common are still being decided, with a preference for flexibility, but there is strong potential for development at each station to complement each other.

Old Oak Common would need to be redesigned at significant expense in order to act as a permanent HS2 terminus. And because passengers wishing to arrive in central London would need to change onto other lines at Old Oak Common, the end result is that that connections from Birmingham to central London would likely be no faster than they are now on the existing West Coast Main Line. There are also concerns about the potential for HS2 commuters to overwhelm the Elizabeth Line at Old Oak Common, as this would be the most direct way into central London from the station, in the absence of Euston Station taking up its intended role as the main London terminus.

Section 3: Economic Impact Assessment

Approach to the Economic Impact Assessment

This section presents the findings of the Economic Impact Assessment (EIA) for the Euston Area regeneration.

This EIA explores the potential economic impact of the Euston Area regeneration under a set of development circumstances which are based on the **'Workstream 2' scenario** which is based around a reduced station footprint and integrated delivery of HS2 and NR concourse broadly based on work in response to the Government reset of HS2. This core development scenario has been developed by the Master Development Partner, Lendlease, who have been heavily involved in the designing of masterplans and responding to Central Government direction. It represents the most up-to-date information available in alignment with recent government updates and encompasses three key development areas: the Adjacent Station Development (ASD), adjusted to assume six HS2 platforms in line with the government's announcement, the Northern Approaches development and a minor element of Over Station Element (OSD).

It is important to note that changes in these development circumstances may lead to subsequent adjustments in economic outputs. Nevertheless, this study serves as a valuable tool to highlight the potential economic benefits to all stakeholders if this development scenario materialises.

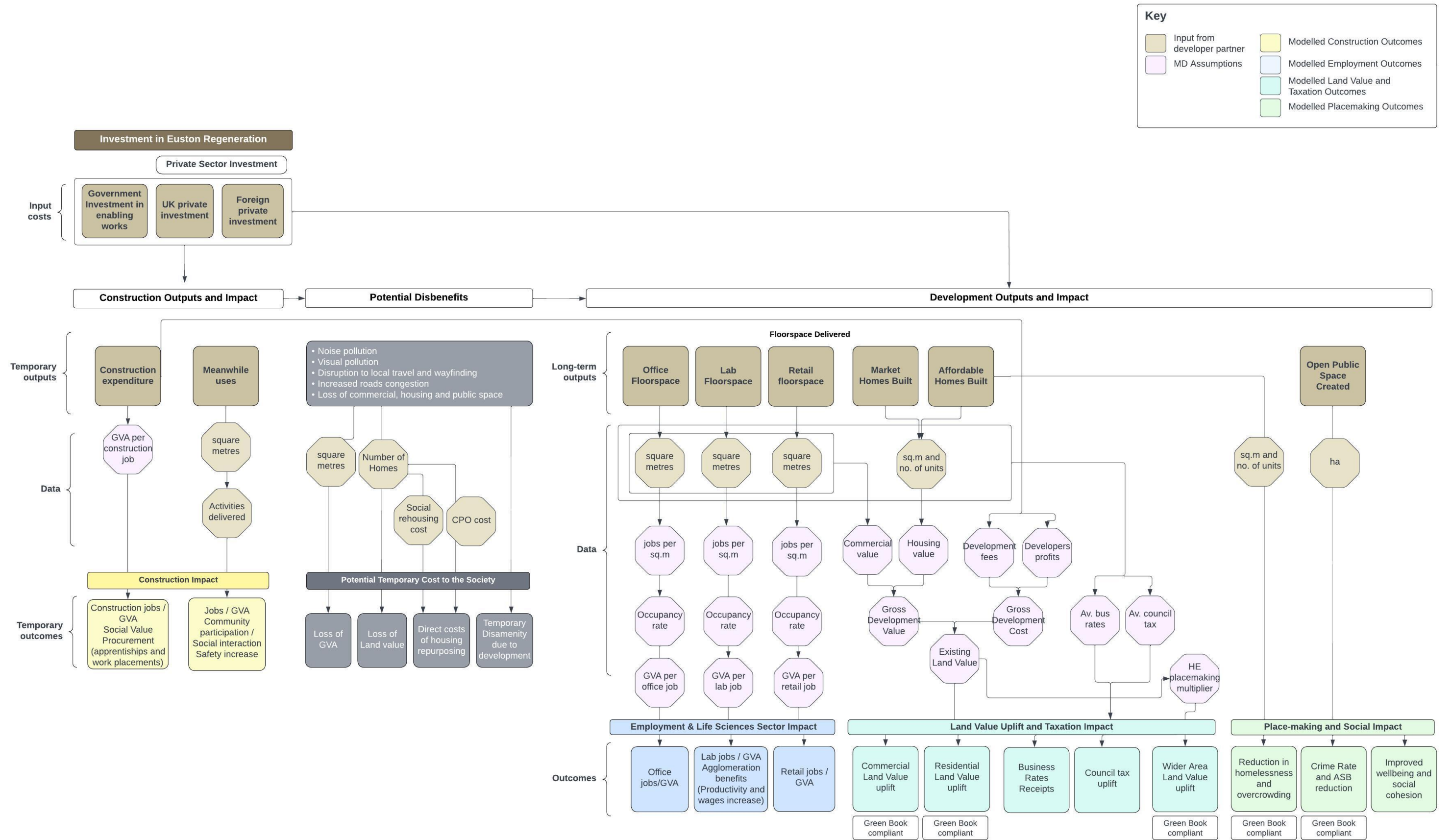
In presenting this information, Metro Dynamics assumes responsibility for the provided figures. Section 4 outlines the methodology used to for the assessment and articulates the assumptions and caveats underpinning the analysis. Metro Dynamics strives to produce a highly credible and realistic analysis, employing government appraisal guidance whenever possible for established economic modelling approaches. Metro Dynamics acknowledges that some of these assumptions comes with high level of uncertainty, and efforts have been made to ensure their realism.

The EIA figures are initially presented in **gross terms** (i.e. excluding additionality factors). GVA figures are in present value (discounted at 3.5%), in real (2023) prices. Section 4 present the findings in net terms, explaining the additionality assumptions considered, and discounted, factoring in the phasing of outputs and impacts over time.

Impact Map

The map below illustrates the inputs, outputs and outcomes considered in this EIA and how they flow from each other. These elements have been identified through collaborative discussions with the project partners.

Figure 10. Impact Map

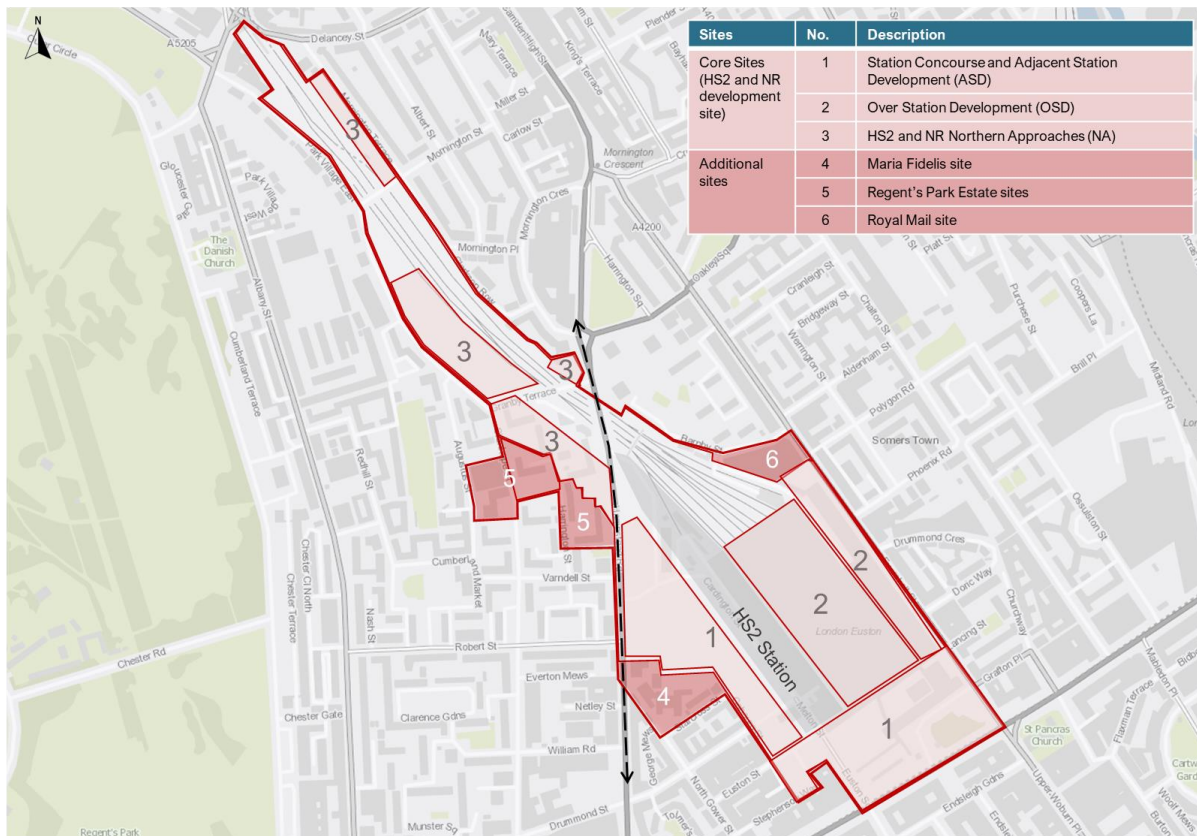


Area Definition and Land Ownership

This EIA includes (Figure 9):

- **Core sites (Lendlease-led HS2 and Network Rail (NR) development area).** These encompass three key development areas:
 - the Adjacent Station Development (ASD);
 - the Northern Approaches development (NA);
 - the Trainshed - element of Over Station Development (OSD).
- **Additional sites (outside the HS2 and NR development area).** These include
 - Maria Fidelis (former school)
 - Plots within the Regent's Park Estate North and South, subject to resident engagement³
 - The Royal Mail site

Figure 11. Area Boundaries (additional sites subject to resident engagement)



Landownership within and outside the red area boundaries is mixed and include the following landowners:

³ Additional sites are purely notional and are not based on official planning policy or guidance. In line with the Inclusive Placemaking objective that should be built into the design, approach and delivery of the Euston development, these sites would need to be developed in close consultation with residents and the local community.

- London & Continental Railways (LCR), the property development company owned by the Government;
- HS2
- Network Rail
- London Borough Camden (LBC)
- Royal Mail



Investment in Euston Regeneration and Phases

£4.2 bn⁴

Total Investment

£2.7 bn

Foreign Direct Investment

£0.6 bn

Government Investment in enabling works

Under the set of development assumptions that form the Workstream 2 scenario, the corresponding level of investment injected into the Euston regeneration over the next 30 years would **total £4.2 bn**. Out of this total investment, £0.8 bn is anticipated to consist of structural enabling works, with £0.6 bn expected to be funded through government resources and £0.2 bn by the developers. The remaining £3.4 bn of the total investment is expected to cover the construction costs of the commercial and residential units, borne by the developers. Of this construction cost, 80% (£2.7 bn) is anticipated to be sourced from foreign investment⁵. A more detailed breakdown is provided in section 4, Methodology.

The development will happen in two phases:

- Phase 1 is expected to run **from 2027 to 2042** and will involve **£1.9bn of private investment** in the Adjacent Station Development (ASD) and HS2 Northern Approaches plus **£0.3bn in sites** (sites 4-6) outside the NR/HS2 development area.
- Phase 2 is expected to run **from 2031 to 2053**⁶. Private sector investment is expected to be **£1.4bn**, including **£0.8bn** of enabling costs for the NR Northern Approaches and Over Station Development (OSD).

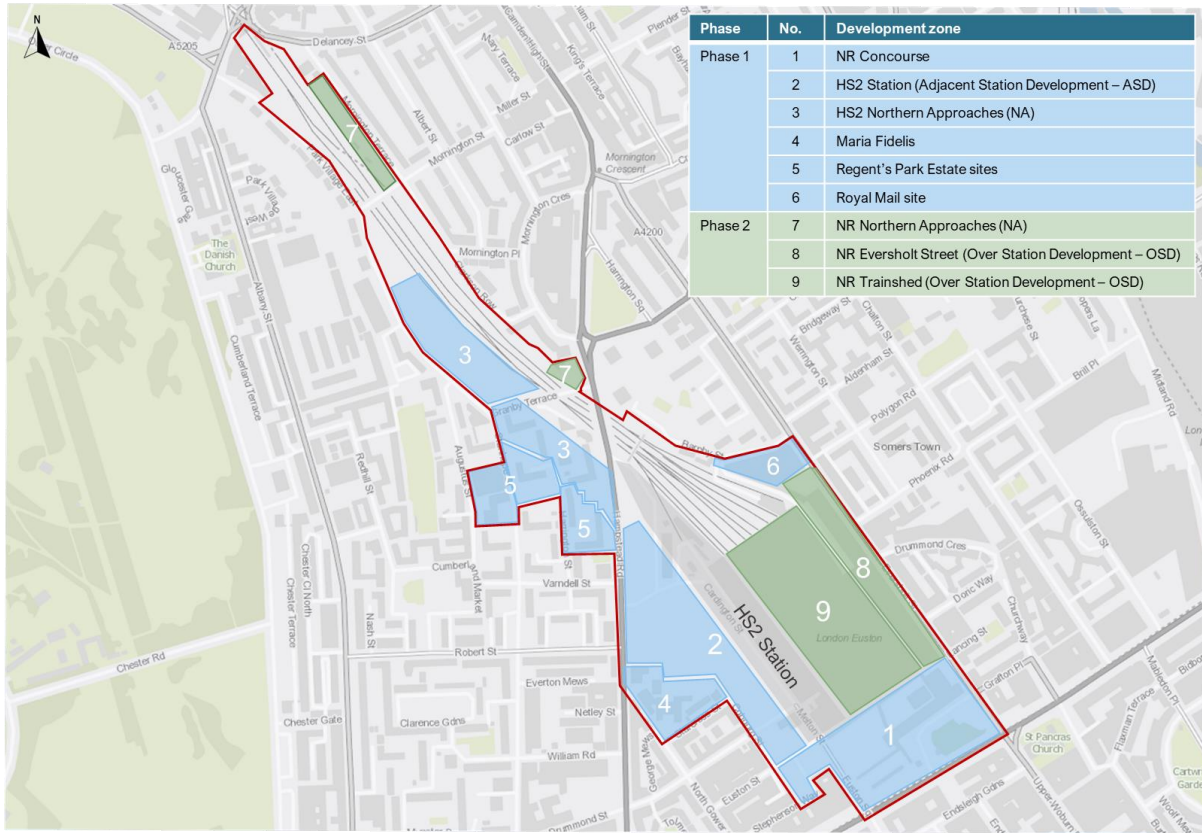
⁴ These investment cost figures are in 2023 prices and not discounted for time preferences. These are rounded to the nearest £0.1bn. All monetised figures in this EIA section below this point are in 2023 prices, discounted at 3.5% rate, assuming 100% additionality.

⁵ Estimates supplied by Lendlease on the basis of similar developments.

⁶ Project phasing has been based on the information provided in the operational plan issued in July 2022. In the absence of further updates since the plan was issued, we have utilized the dates outlined in this plan.

Nevertheless, we recognise that these dates may potentially be subject to change and could be moved later in the future.

Figure 12. Development Phases

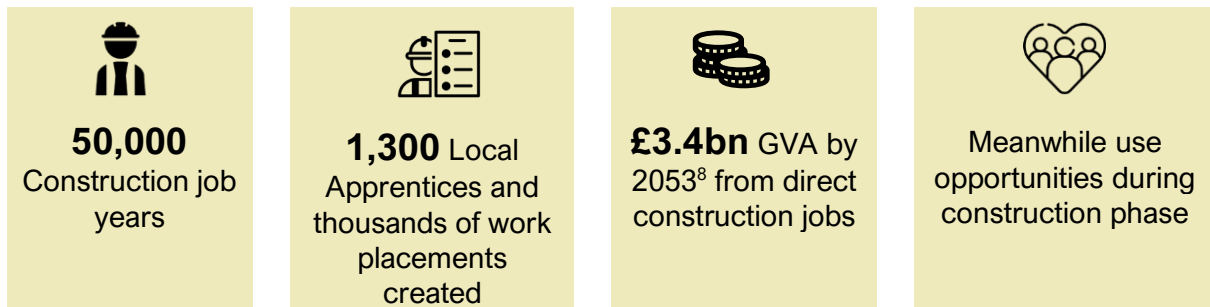


The full amount spent to date on Euston is not clear; however, the most recent figure reported in the National Audit Office report⁷ on Euston (March 2023) estimated that £548m was spent on HS2 Euston station as at the end of December 2022. Given the lack of clarity on expenditure to date against the overall enabling costs, it is possible that the actual remaining public investment could be lower than that assumed here.

⁷ High Speed Two: Euston. Department for transport, High Speed Two Ltd. Session 2022-23, 27 March 2023. HC 1201



Construction Outputs and Impact



Construction Jobs and GVA

- During the construction phase, the Euston Area regeneration will have a significant impact on employment and the economy. It is estimated that 50,000 direct construction jobs will be supported during this phase. This workforce will not only contribute to the project but will also have a ‘multiplier effect’ on the economy through supply chain expenditure, resulting in a further 30,000 indirect jobs. Local businesses are also expected to benefit from temporary growth in expenditure in the local economy, resulting in a further 10,000 induced jobs.
- The jobs created during this phase will play a vital role in making a substantial economic contribution, as measured by Gross Value Added (GVA). Specifically, the direct construction activity is projected to generate £3.4bn of direct GVA over the construction period to 2053, and an additional £2.5bn of indirect and induced GVA over the same period.
- Moreover, the construction phase will generate a series of **social value outputs**. As part of the Euston Social Value Charter, The Euston Partnership and its member organisations are committed to support economic, social and environmental benefit by embedding social value obligations into planning, procurement processes and contracts, construction and operational activities. These obligations will ensure the provision of local workforce training, qualifications, and apprenticeships. It is reasonable to anticipate that a portion of the new jobs created will be filled by individuals who are currently unemployed. Local and regional partners can actively promote this by including social value procurement clauses that encourage the use of local labour and active job brokerage to link the unemployed to new opportunities. Furthermore, the program will offer skill development opportunities for the local workforce within the construction sector.

⁸ Gross GVA (Present Value) = GVA generated by 2053, discounted at 3.5%, with 100% additionality assumed, in real terms (2023 prices).

Meanwhile Uses Impact

- A number of meanwhile opportunities have been identified as a result of the HS2 pause announced by the Government in March 2023. Currently these sites have only been identified as available to April 2025 when works are due to restart at Euston, pending further government announcement.
- Prior to the pause, there have been limited opportunities for meanwhile use within the identified red area boundaries, given the highly constrained nature of the site and the number of inter-related projects. Before the National Temperance Hospital was demolished Camden Collective created temporary workspace there and there has been temporary open space created at the Maria Fidelis School site. A new Construction and Skills Centre is opening on the rear of the Maria Fidelis site which will be in place whilst HS2 is under construction/ 10 years or so. Camden received funding from HS2 to get this built.
- Opportunities for further meanwhile uses entail activating the vacant spaces surrounding the Euston building site with diverse projects such as pocket community parks, green spaces, immersive art galleries, coffee carts, pop-ups, and areas dedicated to community activities. These short-term projects become particularly important in the process of regenerating areas like Euston, where the transformation of spaces is complex and slow.
- Benefits from meanwhile uses have not been captured in this EIA, however such uses are important platforms for active community involvement, allowing local residents, businesses, and artists to participate in the regeneration process, and stimulate economic activity through temporary commercial premises and pop-ups. Meanwhile uses have already hosted and should continue to host events and activities that foster collaboration, networking, and knowledge-sharing among different community groups, helping to build capacity in community organisations. They can nurture a sense of ownership and inclusivity, support local businesses, contribute to the cultural and social enrichment of the area and ultimately mitigate safety concerns associated with vacant and under construction areas.

Figure 13. Identified meanwhile use sites – HS2 pause

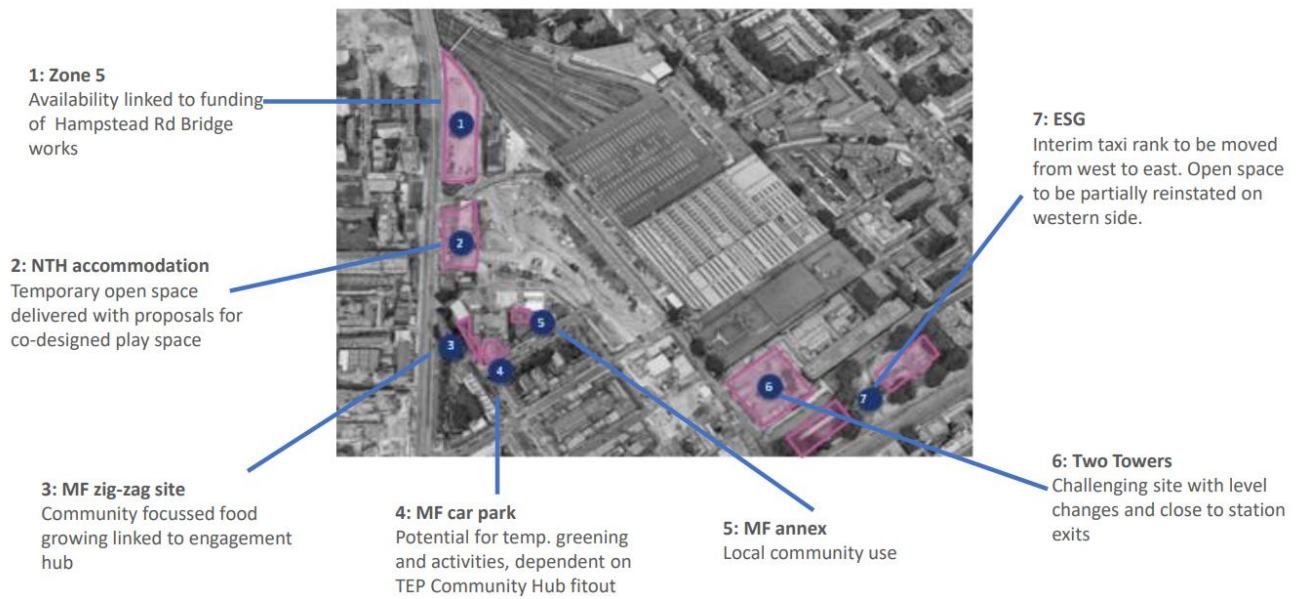


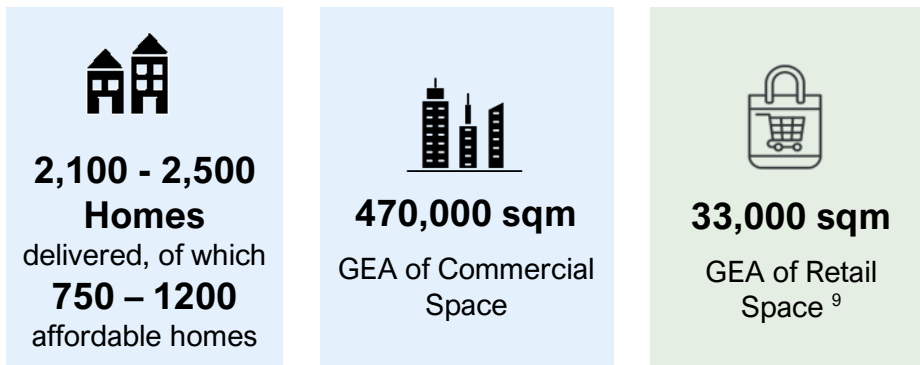
Figure 14. Example of temporary community green space created





Development Outputs and Impact

Floorspace delivered



The anticipated Euston area regeneration within Workstream 2 will provide the indicated floorspace and units below. Figures are rounded where relevant.

Table 1. Summary of floorspace delivered by phase, site, and uses

Core sites (Lendlease-led HS2 and Network Rail (NR) development area)

	Residential units	Residential (Sqm GEA)	Commercial (Sqm GEA)	Retail (Sqm GEA)
ASD (Phase 1, 2027-2042)	620	62,000	313,500	19,800
NA & OSD (Phase 2, 2031-2053)	895	89,460	157,190	13,000
Total	1,515	151,450	470,690	32,750

Additional sites (outside the HS2 and NR development area)

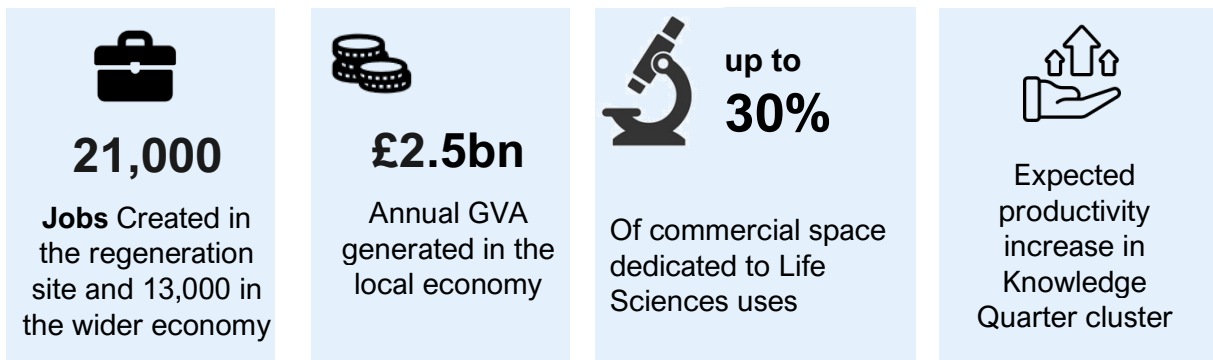
	Residential units	Residential (Sqm GEA)	Commercial (Sqm GEA)
Maria Fidelis (Phase 1)	190-210	20,000	
Regent's Park Estate North (Phase 1)	270-470	37,000	
Regent's Park Estate South (Phase 1)	60-170	10,000	
Royal Mail (Phase 1)	100	10,000	1,400
Total	630-950	67,000	1,400

	Residential units	Residential (Sqm GEA)	Commercial (Sqm GEA)	Retail (Sqm GEA)
Total	2,100-2,500	219,000	472,100	32,750

⁹ The amount of retail space to be provided as part of any development is subject to a Retail Impact assessment

¹⁰ Potential additional homes figures estimated based on design consideration and not yet consulted with local residents (not included in previous EAP).

Place-based Employment and Life Sciences Sector Impact



- It is estimated that the commercial and retail development will generate 3,400 gross direct jobs and a further 2,200 gross indirect and induced jobs by 2030, rising to 21,000 gross direct jobs and 13,000 gross indirect and induced jobs by 2053.
- This will collectively generate **£540m of GVA** in the local economy **by 2030**, with the annual generation of GVA rising to **£2.5bn by 2053**. The total cumulative GVA generated by commercial and retail activity, including jobs on the site and in the wider economy, is expected to total to **£41bn by 2053**.
- Moreover, the higher concentration of high-growth tech and life sciences-related businesses and research institutions in the area is expected to generate **agglomeration benefits**, which will produce **enhanced productivity and increased wages** within the Knowledge Quarter.

Life-science sector impact

Investment in Euston will also support the Life Science sector, for which the area around Euston is one of the most important clusters anywhere in the world. It is expected that:

- 30% of this space, equivalent to 140,000 sqm, will be dedicated to Life Sciences uses, including laboratory and research facilities¹¹.
- 2,400 direct jobs will be created within the life science industry by 2053, which will generate £150m in the local economy.

¹¹ Lendlease estimates, based on discussion with the Euston partnership members

Placemaking, Environmental and Social Impact

- By unlocking a major brownfield site, the project also supports the delivery of new homes and affordable homes targets, without the need to develop greenfield sites elsewhere.
- The provision of good quality housing will be the foundation for a secure, happy, and healthy life. There is increasing recognition of the connection between home quality and resident health.
- There are also a number of benefits associated with an additional provision of affordable homes. There is the private benefit – as measured by land value uplift which captures the efficiency benefit of converting land into a more productive use – and several impacts which are harder to monetise or are only qualitatively assessed in appraisals. These include fiscal savings from the potential savings on health care, improved labour mobility – increased housing supply lowers housing costs and therefore enables people to live in areas they might otherwise not be able to live – and potentially improved educational outcomes by reducing overcrowding. Finally, it can result in savings to the exchequer from avoiding expensive temporary accommodation (TA) costs¹². The DLUHC appraisal guidance focuses on monetising the potential **health benefits arising from additional affordable homes**, specifically through the reduction of overcrowding and homelessness. According to the guidance, the estimated health benefits amount to £206 per additional home per year. Considering a mid-range figure of 40% affordable homes for the Euston area regeneration, this could translate to a yearly health benefit of £190,000 once all affordable homes are delivered (or £1.5m in present value terms over the delivery phase until completion).
- The delivery of new high-quality homes is also anticipated to bring about **significant energy cost savings for residents** when compared to existing properties. According to findings from a recent HBF Report¹³ - Watt a Save (July 2023), these savings amount to £1,620 per household annually. This report, which analyses energy performance data for both new and older properties, highlights that the energy bills for newly constructed homes are, on average, 55% cheaper. This substantial reduction translates to a monthly saving of £135 for households, underlining the economic benefits and efficiency associated with modern, energy-efficient housing. Based on a mid-range figure of 2,300 homes, for the Euston area regeneration this can equate to £3.7m energy savings per annum post completion.
- The provision of new and replacement public open space for pedestrians and cyclists, along with high-quality public realm will create **better site permeability and improve neighborhood connectivity**, particularly east-west connections. For those that currently walk and cycle, this reduces commuting time via active travel. It also increases modal share of residents and visitors using active travel too, overall increasing the likelihood that residents, workers and visitors utilise these amenities and opportunities, which

¹² DLUHC Appraisal Guide (2023)

¹³ HBF Report - Watt a Save (July 2023), The Energy Efficiency of New Homes (hbf.co.uk)

allows them to reap their benefits, such as physical and mental wellbeing. The DfT's Active Model Appraisal Tool (AMAT) is an established methodological tool that can be used to calculate the active travel benefits achieved through improved/new footpaths and cycle routes created.

- The provision of high quality and connected space will contribute to wider **community wellbeing and cohesion**. Fresh housing and streetscape design alongside new retail offers, community services and well-designed public space will improve the sense and attractiveness of the place, which can lead to improve social connection, integration and foster a sense of community.
- In addition to social benefits, the development also holds the potential for significant **environmental benefits**. Improved public realm and the provision of green spaces within the development area can contribute positively to climate resilience and residents, workers and passengers wellbeing. By incorporating renewable energy sources and implementing sustainable design principles, such as green roofs and permeable surfaces, the development can mitigate its environmental impact and reduce carbon emissions. High quality landscape and development layout design have the potential to alleviate congestion and pollution, promoting cleaner air and a healthier urban environment. There is also literature that looks at the impact of specific elements of provision, such as tree-planting¹⁴ to increase amenity value, provide shade, enhance scenery, and reduce air pollution. This body of literature demonstrates that high-quality development can create long-term value in places.
- **Reduction in crime rate and antisocial behavior** is also expected as part of the area improvement. Poor quality urban realm can create an environment where crime and vandalism thrive. On the contrary, interventions such as high quality and well-lit open public space, improved wayfinding via walking and cycling should reduce hidden, unsafe spots. This is supported by a College of Policing study into the impact of increasing the levels of lighting on the street or in other public spaces¹⁵ which suggests a 21% decrease in violent and property crime in areas with improved lighting compared to areas without. Evidence from the Kings Cross development has shown a 22% crime and anti-social behavior reduction since 2007¹⁶. 679 crime incidents were recorded in the Euston Area (Camden 023F LSOA) between Dec 2022-Dec 2023¹⁷. The New Economy Manchester Unit Cost Database suggests an average fiscal savings of £1,250 for avoided crime calls¹⁸. Based on the number of incidents reported, this is equivalent to a potential £850k savings a year. However, it is important to acknowledge that crime reduction often does not result in a net reduction, and there is often a higher level of displacement elsewhere.

¹⁴ Report Sean Fearon, Prof John Barry, Kathryn Lock, Dr Ken Bishop of the Place-based Climate Action Network and Queen's University Belfast.

¹⁵ [Street lighting | College of Policing](#)

¹⁶ Regeneris Consulting, 2017. The economic and social story of King's Cross.

¹⁷ Metropolitan Police data

¹⁸ Reported in 2023 prices

Land Value Impact

Table 2. Estimated Land Value Uplift of the Workstream 2 scenario (£m, Present Value, 2023 prices)

Total	Commercial land value	Residential Land value	Total
Gross Development Value	£4,223	£2,909	£7,131
Gross Development Costs	£3,204	£1,399	£4,603 ¹⁹
Existing Use Value ²⁰ (Brownfield land)	£103	£44	£147
Land Value Uplift	£916	£1,465	£2,381
Discounted	£555	£857	£1,412

Since the 2016 DCLG guidance on project appraisal, it has been recognised that the primary benefits of new residential and non-residential investments occur through land value uplift, where the new development increases the value of the land above its previous use²¹. This has been reconfirmed in DLUHC’s latest appraisal guidance issued earlier in 2023²², which describes the land value uplift as the increase in the underlying value of the land, measured by the future price that a developer would be willing to pay for the land²³. By delivering new and high-quality homes and commercial space in an area that has been a brownfield site for over 10 years, the regeneration of the Euston area will create:

- Estimated **uplift in residential land value** of the site of approximately £857m
- Estimated **uplift in commercial land value** of the site of approximately £555m.
- Recently published analysis²⁴ by Homes England also suggests that as well as increasing the specific site land value, regeneration increases land values of surrounding local areas as the positive impact of improved amenities and economic opportunity filters outwards. For a scheme in London with over 500 units, Homes England guidance suggests that the extent of this may be between **0.15% and 0.4% uplift to surrounding land values**, across an impact area between 1.5km and 2.5km.

¹⁹ Please note that this figure differs from the £3.4bn private investment costs, as it includes an estimate of developer profit, as recommended in the DLUHC land value uplift calculation guidance. Please note that profit estimate is arbitrary and based on ready reckoners.

²⁰ Based on Valuation Office Agency (VOA) - Land value estimates for policy appraisal 2019. Industrial Use Value per hectare in Camden.

²¹ DCLG (2016) The DCLG Appraisal Guide

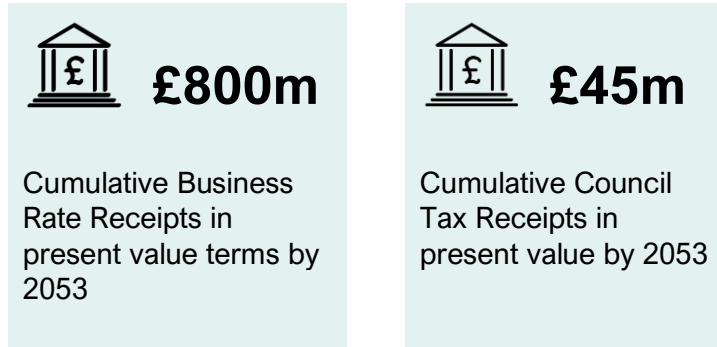
²² DLUHC (2023) DLUHC Appraisal Guide

²³ See methodology for further detail.

²⁴ Homes England (2023) – Measuring Social Value: Paper 1: Measuring the placemaking impacts of housing-led regeneration

The increased land value is supported by research for the Scottish Government which noted the correlation between higher quality design and increased land and property prices which can also have longer term benefits for government revenue through taxation²⁵.

Taxation Impact



- Fiscal benefits will also be generated from the delivery of new commercial space in the form of **increase in business rate receipts** of approximately £89m per annum (gross not discounted when all commercial space have been delivered)²⁶. This equates to cumulative revenue of £1.6bn up to 2053, or £800m in present value terms.
- The creation of new homes will have a direct fiscal benefit for the Council, generating an **increase in Council Tax receipts** of approximately £4.6m pa (gross not discounted when all homes are delivered)²⁷ and providing an additional boost to the revenue base of the Council which equates to cumulative revenue of £93m up to 2053, or £45m in present value terms.

Refer to the methodology section for assumptions used in the above estimates.

Disbenefits

While the Euston area regeneration holds the potential for a positive transformation, certain elements might need careful consideration as they may result in short-term disadvantages for local residents and visitors. A few examples of these potential drawbacks are provided below. It is important to note that the assessment of disbenefits can only be made in

²⁵ Scottish Executive (2006) "A Literature Review of the Social, Economic and Environmental Impact of Architecture and Design"

²⁶ Based on assumptions related to business rate relief and discounts. The gross value is calculated for all commercial space delivered, with no growth forecasts built in.

²⁷ Based on assumptions related to the range of homes delivered (mid figure of 2,300 homes), including exemptions and discounts. The gross value is calculated for all market and affordable homes delivered.

comparison with alternative development options, which have not been fully developed yet. Thus, at this stage, such assessments can only be qualitative.

Nonetheless, it is important to acknowledge that while construction activities may generate some negative impacts locally, these are nowhere near the ongoing negative consequences of leaving the station in its current state. With over 31m rail passengers per year visiting Euston station and 20,000 local residents adversely affected by years of construction delays and government-mandated pauses in works, the implications of leaving the station in its current paused building site status are significant. Disbenefits arising from the new redevelopment would only have a marginal impact when compared to the potential consequences of leaving the situation unaddressed.

- Moreover, while there will inevitably be disadvantages affecting the local population, workers, and visitors due to construction issues, which can undermine public enjoyment of the area and generate adverse health impacts, these drawbacks are expected to be greatly outweighed by the long-term economic benefits articulated in this economic impact assessment. Mitigation measures, such as meanwhile uses, will also be introduced to ensure that disruptions are minimized where possible. Examples of potential disbenefits are outlined below: Construction phases of this development are likely to create increased **noise pollution** in the local area. Noise pollution is expected to affect local residents adjacent to the development sites and commuters and workers using the station. The environmental appraisal guidance provided in the government's Green Book provides a set of monetised estimates for the cost of noise pollution to society. These range from £13 to £227 per marginal decibel increase²⁸, multiplied by the number of years and households to which they apply.
 - In the absence of an extensive study into the projected increase in decibels on the Euston development, this report opts not to provide a range of potential monetary estimates quantifying the value of this disbenefit. It would be expected that noise pollution would have a considerable impact on those living and working in the immediate vicinity of the site, however this would not be likely to be on a scale that meaningfully deteriorates the net benefit and value for money of regeneration.
- Another disbenefit of construction is the creation of **visual pollution**, resulting from the use of construction equipment and storage facilities. Visual pollution is likely to blight the amenity value of the local area, with several studies showing residents living in visually degraded locations experiencing higher levels of stress, anxiety and dissatisfaction with their living conditions. This disbenefit is difficult to monetise however, given that visual pollution cannot be easily tied to market values (in the same way that air pollution can be measured by its health cost), and the Green Book does not provide survey estimates measuring society's willingness to pay for reduced visual pollution.

²⁸ Green Book Appraisal Guidance, p83.

https://assets.publishing.service.gov.uk/media/623d99f5e90e075f14254676/Green_Book_2022.pdf

- This disbenefit is difficult to mitigate too, given the scale of development, the large number of local residents to the area, and the necessity of maintaining a nationally significant train station in its full functionality during construction. The site in its current condition, i.e., a 'do-nothing' scenario, would continue to present both visual and noise pollution, and inconvenience to residents and commuters. This underlines the frustration by local residents expressed towards the two-year construction pause currently in place as it prolongs visual and noise disbenefits. As such, acceleration of development to bring the finish date forward may be the most effective method of reducing the long-term visual and noise pollution associated with construction. Indeed, it may also be possible that, once in operation, the upgrading of the station and the improvement of public space in its surrounding area lead to a lower level of visual and noise pollution than at any time in recent history, during which it has experienced a lengthy period of overcrowding and construction works.
- **Local travel and wayfinding** may be adversely affected during the construction phase, leading to inconvenience for residents and visitors. Euston currently contains several temporary walkways and cordoned-off areas, with a large area at the north of the station currently brownfield land. These are likely to create longer or less desirable journeys for local residents and commuters which would be expected to negatively impact the quality of life. This could also contribute to increased road congestion, further impacting the daily lives of those in the vicinity.
 - Local travel and wayfinding disbenefits would very likely be alleviated upon completion of the station and concurrent improvement of the surrounding area. Having said this, an increased station footprint and level of activity could lead to the creation of new road congestion, through delivery vehicles, taxi trips and the general use of private vehicles, as a result of increased local population and larger number of commuters. This would require careful management with key stakeholders such as Transport for London, HS2, and Network Rail, as well as consultation with local residents, businesses and other stakeholders.
 - Transport Appraisal Guidance, issued by the Department for Transport, quantifies the social impact of increased road congestion and increased road accidents. However, Metro Dynamics does not have access to reliable data on the potential impact of the Euston development on traffic flows, thus does not estimate whether there would be a societal cost of increased congestion or road accidents.
- In the development scenario that forms the basis of this report, regeneration of additional sites in the longer term identified in the Euston Area Plan such as Maria Fidelis and part of Regent's Park Estate could create further disruption for local residents in the short term. Although the end result will be a net additional number of homes, the construction of these is likely to last a number of years. Previous densification of housing sites in London have involved temporary housing for affected residents. This might cause a short term negative impact on local residents' wellbeing.
 - Metro Dynamics does not hold novel information on the exact impact of housing construction on existing residents on additional sites. It has, however, outlined in its economic case report, the inclusive principles that should guide construction activity in local community, informed by the various community groups and forums in the

area. These include community safety, and meaningful, transparent, and accountable resident engagement and involvement, with Euston remaining a “genuine place” whilst development is underway.

- It is possible that there may be some **adverse health effects** relating to change in **air quality** around the development area during construction. Construction activities can generate dust and particulate matter (PM), which can be harmful to local air quality. These particles can become airborne during activities like excavation, demolition, and material handling, contributing to increased levels of PM in the atmosphere. Road traffic from delivery vehicles such as lorries also results in higher emissions from vehicles, including pollutants like carbon monoxide (CO) and NOx. An established base of academic research demonstrates that exposure to pollutants can lead to respiratory issues, cardiovascular problems, and other health concerns. The Green Book Appraisal Guidance measures these impacts as ‘Damage Costs’, whereby emissions changes are multiplied by pre-calculated unit costs. The societal cost of construction-related air pollution at Euston would thus require data collection on emissions changes in nearby communities. Whilst outside the remit of this economic report, Metro Dynamics encourages an environmental review of the local impact of construction activity.
- **Other environmental indicators** that are monetised as social costs in the Green Book include potential changes in outdoor nature-based recreational opportunities which may cause loss of physical health benefits. However, it is the partners commitment, signed via the Euston social value charter, to ensure that environmental benefits are sought together with social and economic outcomes at every stage of the development, from planning, construction and operational activities.

Section 4: Methodology

This section outlines the methodology used for the assessment and articulates the assumptions and caveats underpinning the analysis. The analysis aims to produce a highly credible and realistic impact assessment, employing government appraisal guidance whenever possible for established economic modelling approaches.

Model Assumptions and Considerations

- **Costs, outputs and impact figures here presented are specific to the Euston Regeneration program alone** (they do not include investment related to the conventional station redevelopment and new station development, as assessed by DfT and HS2, and underground network and bus access upgrades, as appraised by TfL).
- In absence of more detailed information, costs are assumed to be equally distributed over the construction period and outputs are assumed to be realised in tranches, with the first tranche expected by 2030.
- The analysis is based on the start year of **23/24, serving as the baseline** for assessment. It is important to note that the analysis is not conducted retrospectively.
- Although all impacts and economic rationale are assessed from a **UK plc. perspective**, this assessment is place-based, and direct and indirect employment outcomes are derived from the commercial elements developed on-site.
- Outputs and outcomes are presented initially as **gross figures** and **discounted**, factoring in the phasing of outputs and impacts over time (present value terms).
- Outputs and outcomes are estimated in **real terms**, this means the effects of general inflation has been removed using the most recent GDP Deflator forecasts by the Office for Budget Responsibility (OBR).
- The benefits outlined here should be viewed in the context of capturing the overall impact of the Euston area regeneration. They are **not intended to be aggregated**, and as the work transitions to the economic case appraisal stage, it is crucial to differentiate between Green Book compliant metrics (such as land value) and those that are not (like place-based employment outcomes). Figure 9 offers a breakdown of the benefits that can be included in a Green Book compliant appraisal. Assumptions regarding additionality will also need to be taken into account during the appraisal stage. Metro Dynamics acknowledges that certain assumptions used to estimate outputs and outcomes, such as developer profit for land value calculations, may be speculative. Additionally, floorspace outputs like the number of homes delivered are subject to a high level of uncertainty at this point. Efforts have been made to ensure realism by using recognised government guides and engaging in conversations with the developers, project partners and senior economists from Homes England, TfL, and DfT to test some of the assumptions made.
- Outputs are based on the **‘Workstream 2’ scenario**. This core scenario represents the most up-to-date information available in alignment with recent government updates. It encompasses three key development areas: the Adjacent Station Development (ASD), adjusted to assume six HS2 platforms in line with the government's announcement, the

Northern Approaches development and the Trainshed Over Station Element (OSD). The extent of this OSD is lesser than in the ‘Rev T2 minus’ scenario (discussed below), in recognition of the ambition to deliver the HS2 station at a lower total cost. It also included potential long term development of non HS2/Network Rail land such as sites within the Regent’s Park Estate, Maria Fidelis and the Royal Mail site, as identified in the Euston Area Plan.

- Scenario testing** is employed to illustrate how the outputs and benefits could improve when potential variations of the Workstream 2 Scenario are implemented. Variations include an accelerated development, a larger development area and a taller development, as well as a combination of these three. These variations are based on high-level assumptions and serve as a mean to test how the current scenario could be stretched to increase economic impact. It is important to note that they are not based on any masterplan work. Similarly, they might require adaptation and changes in requirements from the London Plan guidance and planning authority, which have not been tested at this stage, as further expanded in section 5 of this report. We also present how outputs and benefits might decrease in the case of a *‘Rev T2 minus’ Scenario* being implemented. This scenario is based on a revised landowner masterplanning work, which was presented in the 2021 HS2 Sprint Report prepared by HS2, Network Rail and The Euston Partnership. It featured a substantially larger Over Station Development (OSD), leading to higher enabling costs, anticipated to be funded by the government. The Rev T2 scenario challenged current building height restrictions dictated by London's protected lines of sight under the Local View Management Framework (LVMF) planning regulations. A reduced capacity *‘Rev T2 minus’ Scenario*, featuring lower development outputs and a lower risk from an LVMF perspective, has therefore been presented as part of the scenario analysis. More details are provided in section 5.

Costs Assumptions

The development under Workstream 2 scenario is expected to occur in two phases (See figure 10 in Section 3):

- Phase 1** refers to the development of ‘Adjacent Station Development (ASD), on the west side of the station, HS2 Northern Approaches and Additional sites development.
- Phase 2** refers to the NR Northern Approaches and Over Station Development (OSD), which requires enabling works funded by the public sector to enable the private development.

Table 3. Construction phases

Phases	Description	Construction Start	Construction End
Phase 1	Adjacent Station Development (ASD) and additional sites	2027	2042
Phase 2	Northern Approaches and Over Station Development (OSD)	2031	2053

Cost estimates for enabling and development costs have been provided by the private development partner, Lendlease.

- **Development costs** have been estimated by Lendlease using BCIS General Building Cost Index. These costs encompass the building of both housing and commercial space²⁹ and to which a further 50% additional costs (professional fees, DM/PM fees, contingency, prelims, sales and marketing fees) have been assumed.
- **Enabling costs** have been estimated by Lendlease based on the figures presented in the 2021 Sprint Report. An allocation methodology was employed (utilising the number of additional piles) to proportionate the OSD costs as outlined in the Spring Report, which were based on the major OSD development under the Rev T2 scenario. These costs were then reported in 2023 prices.

Phase 1 will be essential to unlock Phase 2 (with Government costs expected to occur in Phase 2).

Table 4. 'Workstream 2' Costs

Workstream 2 Construction Costs		
Private	Phase 1	£1,440m
	Phase 2	£797m
Workstream 2 Development Fees (professional fees, DM/PM fees, contingency, prelims, sales and marketing fees)		
Private	Phase 1	£720m
	Phase 2	£398m
Total Development Costs		£3,356m
Workstream 2 Enabling costs		
Public	Phase 2 OSD Trainshed	£636m
Private	Phase 2 Fan & NR Northern Approaches	£178m
Total Enabling Costs		£814m
Total Workstream 2 Costs		
Total Private	Phase 1 and 2	£3,534m
Total Public	Phase 2	£636m
Total Costs		£4,170m

- The amount spent to date is not clear; however, the most recent figure reported in the National Audit Office report on Euston (March 2023)³⁰ estimates it to be £548m.
- The anticipated Foreign Direct Investment (FDI) in the area is expected to range between 80%-100%. This estimate is derived from information supplied by Lendlease.

²⁹ This is a broad figure for commercial space. This could vary depending on the exact use of office, retail or life sciences space.

³⁰ <https://www.nao.org.uk/reports/high-speed-two-euston/>

Outputs and Impact Assumptions and Calculation

Floorspace

The phasing and mixed-use floorspace under the 'Workstream 2' scenario, provided by the developer, are presented in the table below. Floorspace figures are presented as Gross External Area (GEA) in square meters, rounded to the nearest thousand. Commercial space includes both office and life sciences (laboratory space). Current working assumption is that 30 per cent of commercial space would be designated for life sciences, i.e., approximately 94,000 sqm in Phase 1 and 47,000 GEA in Phase 2.³¹

Table 5. Total gross floorspace, Phase 1 and 2 Core sites³²

Phases	Commercial space	Residential space	Retail space	Total
Phase 1 (2027 – 2042)	313,500	62,000	19,800	395,300
Phase 2 (2031 – 2053)	157,200	89,500	13,000	259,700
Total	470,700	151,400	32,700	655,000

Table 6. Additional sites

Phases	Commercial space	Residential space	Total
Phase 1 (2027 – 2042)	1,400	61,300 - 73,900	62,700 – 75,300

With construction to start in 2027 and lasting twenty-seven years over both Phase 1 and 2, significant uncertainty exists over the precise phasing of floorspace delivery. As mentioned, all floorspace is assumed to be delivered in four tranches, spread equally across the total construction phases of both Phase 1 and Phase 2, separately. Given that the exact phasing isn't confirmed, this therefore means that there is a margin of error in the final estimates. Nonetheless, having consulted with development partners, we are confident that the phasing assumptions we have used are reasonable given current knowledge. The table below shows the subsequent completion of floorspace that the model assumes. Please note that the below table shows phasing for core sites only. Phasing for additional sites was informed by notional estimates of potential completion dates.

³¹ The precise amount of life sciences space will depend on market demand and will require further market testing and feasibility work to be undertaken. Nonetheless, there is clear demand for additional space from the sector as evidenced by recent investments in the area by AstraZeneca.

³² Rounded to the nearest hundred

Table 7. Phased delivery of floorspace, Phase 1 (Core sites only)

Floorspace (GEA, sqm)	2030	2034	2038	2042	Total
Commercial	78,400	78,400	78,400	78,400	313,500
Residential	15,500	15,500	15,500	15,500	62,000
Retail	4,900	4,900	4,900	4,900	19,800
Total	98,800	98,800	98,800	98,800	395,300

Table 8. Phased delivery of floorspace, Phase 2

Floorspace (GEA, sqm)	2036	2042	2048	2053	Total
Commercial	39,300	39,300	39,300	39,300	157,200
Residential	22,400	22,400	22,400	22,400	89,600
Retail	3,200	3,200	3,200	3,200	12,800
Total	64,900	64,900	64,900	64,900	259,600

Employment & GVA

Employment Density

Employment Density assumptions were taken from the London Employment Sites Database (LESD, 2021),³³ adopted for policy documents such as the London Plan and the Mayor’s Transport Strategy, and the GLA’s employment projections. This was assumed to be the most relevant contemporary study of employment densities, given its London-specific focus and publication in 2022.

LESD estimates build on widely adopted figures provided by the Homes and Communities Agency (HCA, 2015), finding that office densities in London have increased compared to the national figures from the HCA, and that new build densities are often higher than in traditional offices (LESD, page 12). This is reflected in the square metres per worker

³³ London Employment Sites Database (2021), CAG Consultants.
https://www.london.gov.uk/sites/default/files/lesd_2021_final_report_22jun2022.pdf

estimates below – for office and R&D use classes, the LESD indicates a lower number of square metres per worker than as reported by the HCA.

Table 9. Employment Densities, square metres GIA per worker

	London Employment Sites Database (2021)	Homes and Communities Agency (2015)
Offices (use class B1a)	11.3	10-13
R&D space (use class B1b)	36	40-60
Retail space (use class A1)	17.5	15-20

Metro Dynamics takes the industry standard 0.95 ratio converting Gross External Area to Gross Internal Area, therefore reducing GEA by 5% to reach GIA figures³⁴. The LESD reports an industry standard conversion ratio between Gross Internal Area and Net Internal Area as 0.8, echoed by HCA’s estimate gross to net (NIA) figures using a 0.8 ratio, which is quoted in both the LESD and HCA reports as industry standard.

Vacancy rate

Metro Dynamics assumes a vacancy rate across office, science, and retail use classes, of 3%. This reflects evidence from CoStar, a prominent commercial and real estate database³⁵, which shows a 3% average vacancy rate of grade A³⁶ office properties in Euston and King’s Cross over the five years between 2018 and 2023, significantly below the Greater London average of 8% over the same period. This matches the value given in an economic evaluation of the King’s Cross development published in 2017, that reports a 3% commercial space vacancy rate across the development.³⁷ Further contemporary research^{38 39} indicates that a shortage of high quality office space in London may persist for several years to come, supporting the likelihood of a very low vacancy rate in Euston, which is set to be a prominent regeneration site consisting of high class space with world-class connectivity both to high growth companies nearby and to the rest of England.

Metro Dynamics analysis of the CoStar database also reveals a 1% vacancy rate of grade A retail properties in Euston and King’s Cross between 2018 and 2023. Whilst CoStar was not

³⁴ Homes and Communities Agency, Employment Density Guide, 3rd edition (2015).

³⁵ Costar

³⁶ Defined in Costar as 4* and 5* properties

³⁷ Regeneris The Economic and Social Story of King’s Cross (2017). <https://argentllp.co.uk/media/The-Economic-and-Social-Story-of-Kings-Cross.pdf>

³⁸ Evening Standard, ‘Helical warns of shortage of top-quality London office space until 2030’ (2023) <https://www.standard.co.uk/business/helical-shortage-quality-london-office-space-2030-b1072770.html>

³⁹ Cushman & Wakefield, ‘availability of Grade A office space in London reaches 12-year low’ (2022). <https://www.cushmanwakefield.com/en/united-kingdom/news/2022/10/availability-of-grade-a-office-space-in-london-reaches-12-year-low>

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used to assess life sciences floorspace vacancy rates, due to difficulties in capturing a clear definition of laboratory space, a recent report published by British Land and Savills finds a 1% vacancy rate and severe supply shortage of life sciences real estate in London⁴⁰.

Despite evidence to suggest retail and life sciences space may have a vacancy rate of just 1%, this analysis assumes a flat vacancy rate of 3% across all use classes on the Euston development, in the interest of simplicity and caution.

Home working

Office-based working practises clearly still have a strong part to play in London, with London worker days spent in the office increasing to and since stabilising at between 50-70% of pre-pandemic levels⁴¹⁴²As research above indicates, this is particularly true of prime office space in central London, including the area around King's Cross and Euston. Euston provides an opportunity for firms to locate in landmark central London office space, an opportunity has proven an attractive draw for international companies such as Google and Meta in nearby King's Cross.

Evidence also seems not to exist that firms en-masse are re-shaping their office densities as a result of work-from-home. While many firms have implemented work-from-home arrangements and increased desk-sharing ratios to reduce rental costs,⁴³ these policies have not led to a significant reduction in office demand, especially in prime locations and near major transport nodes⁴⁴.

Metro Dynamics therefore takes the view that online working will not make a big impact on the demand for premises at Euston, nor cause a large skew in employment densities assumed as part of the economic modelling in this analysis.

Job phasing

Metro Dynamics assumes that, subject to the chosen occupancy rate, there is no additional time lag between floorspace delivery and employer occupancy. This means that upon completion of the first tranche of floorspace in 2030, we assume that 97% of this floorspace will be occupied by employers (thus jobs will be based on the site) in the same calendar year.

⁴⁰ British Land, Savills, 'Accelerating Innovation – a five-point plan to boost life sciences real estate' (2023) <https://www.britishland.com/sites/british-land-corp/files/2023-11/Accelerating-Innovation-Report-Nov-2023.pdf>

⁴¹ Centre for Cities, 'The impact of covid-19 on agglomeration' (2023). <https://www.centreforcities.org/reader/office-politics/the-impact-of-covid-19-on-agglomeration/>

⁴² Centre for Cities, 'Just how many days are people working from the office?' <https://www.centreforcities.org/blog/just-how-many-days-are-people-working-from-the-office/>.

⁴³ Guardian, 'Half of big international firms to cut office space in next three years – survey' (2023) <https://www.theguardian.com/business/2023/jun/06/half-of-big-international-firms-to-cut-office-space-in-next-three-years-survey>

⁴⁴ Fig Flex Offices, '5 key trends impacting office space in 2023' (2023). <https://www.figflex.com/news/5-key-trends-impacting-office-space-in-2023>

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Based on this assumption, and the tranche approach to floorspace delivery, Metro Dynamics assumes that jobs are delivered in four tranches across Phase 1 and Phase 2 respectively, in equal phasing to the delivery of floorspace.

Construction jobs

Construction jobs were calculated using construction skills labour coefficients from the Homes and Communities Agency (HCA)⁴⁵. For each £1m spend per year (at 2011 prices), there are 19.9 new jobs for new housing, 13.9 for infrastructure, and 16.6 private commercial. In this analysis, new housing spend refers to construction costs of residential floorspace, infrastructure cost refers to public expenditure on enabling works, and private commercial refers to construction costs of commercial, retail and sciences space. Adjusting these to 2023 prices using the Bank of England's inflation calculator,⁴⁶ the total spend was divisible by the provided multiplier to calculate the number of construction jobs in each year.⁴⁷ This was the direct construction employment impact – indirect and induced employment impacts of construction activity were counted in addition to the direct impact.

Employment multipliers

Metro Dynamics uses standard government employment multipliers to calculate indirect and induced jobs⁴⁸. Indirect jobs (Type 1 multipliers) are defined as jobs generated by the immediate suppliers and then further down the supply chain as a result of additional direct employment. An example of this is jobs in the manufacturing of pharmaceutical products that are generated by the research and design process in laboratories.

As a result of the increased level of household income in the economy created by direct and indirect employment, a proportion of this income will be re-spent on final products, creating induced employment (Type 2 multipliers). Examples of this include restaurant staff, childcare workers, grocery and clothing store jobs, and recreation and entertainment jobs.

⁴⁵ [Homes and Communities Agency \(HCA\), \(2015\); Calculating Cost per Job Practice Note. Note](#)

⁴⁶ <https://www.bankofengland.co.uk/monetary-policy/inflation/inflation-calculator>

⁴⁷ The Bank of England inflation calculator was utilized to maintain consistency with other benefit calculations. However, if the annual average construction material price indices (DBT/ONS/Building Cost Information Service (BCIS)) were employed to adjust the 2011 labor coefficients, a lower construction jobs figure would be expected (44,000 direct construction jobs instead of 50,000 direct construction jobs supported during the construction phase). The 'multiplier effect' on the economy through supply chain expenditure, using CPI, would result in a further 27,000 indirect jobs and 9,000 induced jobs (instead of 30,000 indirect jobs and 10,000 induced jobs). Economic benefits generated directly through construction activity using CPI rates are projected to yield £3bn of direct GVA over the construction period to 2053 (instead of £3.4bn). Nonetheless, economic benefits remain significant even when higher inflation rates are considered.

⁴⁸ Multipliers from Scottish Government, Supply, Use and Input-Output Tables.

[https://www.gov.scot/publications/about-supply-use-input-output-tables/pages/user-guide-multipliers/#:~:text=The%20GVA%20multiplier%20is%20expressed,the%20economy%20as%20a%20whole.Scottish%20multipliers%20have%20been%20favoured%20over%20the%20ONS%20multipliers%20for%20completion%20\(Type%20I%20and%20II\).The%20ONS%20does%20not%20currently%20produce%20Type%20II%20multipliers.](https://www.gov.scot/publications/about-supply-use-input-output-tables/pages/user-guide-multipliers/#:~:text=The%20GVA%20multiplier%20is%20expressed,the%20economy%20as%20a%20whole.Scottish%20multipliers%20have%20been%20favoured%20over%20the%20ONS%20multipliers%20for%20completion%20(Type%20I%20and%20II).The%20ONS%20does%20not%20currently%20produce%20Type%20II%20multipliers.)

Each sector (Standard Industrial Classification) has a unique multiplier value, for both Type 1 and Type 2 effects. The multiplier values used in this analysis, to calculate the total number of indirect and induced jobs for each use class of space on the Euston site, match the sectoral definition used to capture the GVA per job of each use class. The choice of sectoral definition used to capture GVA per job is explained in the ‘GVA calculations’ section below.

There is assumed to be no time lag between the generation of direct jobs and multiplier employment effects.

Employment multipliers are intended to be applied after additionality assumptions. As this iteration of the Economic Impact Assessment does not use any assumptions regarding additionality (see below), estimates of multiplier employment effects are intended to provide an estimate of the broader economic footprint of the regeneration area once developed.

GVA calculations

The analysis assumes no time lag between job creation and the resulting output (Gross Value Added) generated by each job at Euston.

Total additional GVA is the product of the number of jobs that will be located on the site, and the GVA that each job will produce. This was segmented by each use class on the site, such that the above calculation was made separately for office jobs, retail jobs, life sciences jobs, and construction jobs. GVA per job was calculated using the sum of GVA per sector, divisible by the count of total sector jobs, for each of these sectors in Camden.

The total count of jobs per sector in Camden was obtained using Business Register and Employment Survey data (BRES). The sum of GVA per sector in Camden was obtained using the ONS’ *Regional gross value added (balanced) by industry: local authorities by ITL1 region: TLI London* release. Both BRES and GVA figures were taken from the year 2021 (GVA figures in 2021 prices). The resulting GVA per job figures were then uprated in to November 2023 prices by a factor of 1.183, taken from the Bank of England’s inflation calculator.⁴⁹

Metro Dynamics uses Standard Industrial Classification (SIC) 2007 groups, as reported in the BRES and GVA data, to define the different types of sector jobs to be located on the Euston regeneration site.

- Construction jobs were defined using *Construction* (SIC groups 41-43). GVA per job in Camden was found as £100,111 in 2021 prices (uprated to £118,460).
- Retail jobs were defined using *Retail trade* (SIC 47). GVA per job was found to be £70,952 in 2021 prices (uprated to £83,957).
- Office jobs were captured using the average of a set of industry groups deemed relevant. *Information and communication* (SIC 58-63), *Finance and insurance activities* (SIC 64-66), *Professional, scientific and technical activities* (SIC 69-75), and *Administrative and*

⁴⁹ <https://www.bankofengland.co.uk/monetary-policy/inflation/inflation-calculator>

support service activities (SIC 77-82). The average GVA per job across these industries in Camden was £113,446 in 2021 prices (uprated to £134,240).

- Previous attempts to categorise life sciences jobs using SIC groups have found the relevant groups are *Research and experimental development on biotechnology* (SIC 7211) and *Other research and experimental development on natural sciences and engineering* (SIC 7219)^{50 51 52}. However, sector GVA figures are not available at this granular sector level for the Camden geography.
 - A proportional approach was thus taken to estimating the GVA contribution of life sciences in Camden. *Research and experimental development on natural sciences and engineering* (SIC 721) was found to contribute 6% of all *Professional, scientific and technical activities* (SIC 69-75) jobs in Camden in 2021. Assuming SIC 721 also contributes 6% of GVA generated by *Professional, scientific and technical activities*, the total GVA contribution of *Research and experimental development on natural sciences and engineering* was £449m, which then dividing by the 5,000 SIC 721 jobs in Camden, leads to a GVA per job of £89,772 in 2021 prices (uprated to £106,226). This was the figure adopted for economic modelling.

The figure adopted is similar, but slightly lower, than if defined more broadly using all *Professional, scientific and technical activities* (SIC 69-75), which would give a value of £95,910 in 2021 prices (£113,490 in 2023 prices). This supports that the proportional approach taken is likely to lead to a sensible figure.

All figures above are likely to be a conservative estimate. This is because Camden average GVA per job is likely to be lower in the outer north of the borough, than in the central and south of the borough, where Euston is located. This may be particularly true of jobs in knowledge-intensive services such as finance, marketing, legal, and digital (for which central London is a highly productive area).

Given the above definition of indirect jobs, Metro Dynamics uses the simple assumption that they are in the same industry as direct jobs (i.e., defined by the same SIC code), hence GVA per indirect job, both for construction jobs and for all use classes on the Euston site, is recorded equal to GVA per direct job. Metro Dynamics recognises however that indirect jobs may also be in adjacent industries or located outside of Camden.

Given the above definition of induced jobs, Metro Dynamics classifies these under SIC code 47 (retail activities). Thus, GVA per each induced job is equal to the GVA per retail job in Camden.

Place making and social impact

Reduction in overcrowding and homelessness

⁵⁰ Department for Business, Energy and Industrial Strategy, Bioscience and health technology sector statistics 2020. [Bioscience and health technology sector statistics 2020 - user guide - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/91111/bioscience-and-health-technology-sector-statistics-2020-user-guide.pdf)

⁵¹ ABPI Life Sciences Superpower Report, 2022. [ABPI Life Sciences Superpower Report](https://www.abpi.org.uk/life-sciences-superpower-report/)

⁵² Life Sciences 2030 Skills Strategy, Science Industry Partnership. [sip-life-sciences-2030-skills-strategy-digital-version.pdf \(cogentskills.com\)](https://www.cogentskills.com/life-sciences-2030-skills-strategy-digital-version.pdf)

The DLUHC appraisal guidance suggests assessing the monetised value of potential health benefits resulting from additional affordable homes, arising from the reduction of overcrowding and homelessness. To estimate the potential health impact of additional rented affordable housing, the probability of a new tenant that had previously been living in a poor condition or overcrowded property needs to be calculated. In addition, as there are large negative health impacts from rough sleeping, an additional house that is allocated to a rough sleeper can be expected to deliver relatively large health impacts. Accounting for the above considerations, based on a number of assumptions and established research, DLUHC appraisal guidance estimates that the annual health impact is the annual £4,900 health care cost multiplied by the probability that someone is a former rough sleeper (1.5%) plus the probability of a new rented affordable housing unit reducing overcrowding (88.5%) multiplied by the annual impact of reduced overcrowding (£149). Based on the above assumptions, the external health impact of an additional affordable housing unit is equal to £206 per year. Considering a mid-range figure of 40% affordable homes for the Euston area regeneration, this could translate to a yearly health benefit of £190,000 once all affordable homes are delivered (or £1.5m in present value terms over the delivery phase until completion).

Crime and anti social behaviour reduction

Based on Kings Cross case study, we estimated a 22% reduction in overall crime and antisocial behaviour reported in the Euston area. Crime data have been sourced from the London Metropolitan Police report data. 679 crime incidents were recorded in the Euston Area (Camden 023F LSOA) between Dec 2022-Dec 2023. The New Economy Manchester Unit Cost Database suggests an average fiscal savings of £1,250 for avoided crime calls⁵³. Based on the number of incidents reported, this is equivalent to a potential £850k savings a year. However, it is important to acknowledge that crime reduction often does not result in a net reduction, and there is often a higher level of displacement elsewhere. Research has shown that the overall net saving might be reduced by 75% when displacement is factored in.

Land Value

Metro Dynamics uses guidance from the Department for Levelling Up, Housing, and Communities (DLUHC) on applying land value uplift in economic appraisal⁵⁴. Land value uplift is the net of Gross Development Value⁵⁵, less Gross Development Costs⁵⁶, less Existing Use Value⁵⁷. Land value uplift is calculated separately for both residential and commercial uses. For both residential and commercial uses, Gross Development Value, which is a

⁵³ Reported in 2023 prices

⁵⁴ Department for Levelling Up, Housing, and Communities, DLUHC Appraisal Guide.

<https://www.gov.uk/government/publications/dluhc-appraisal-guide/dluhc-appraisal-guide#land-value-uplift-approach-to-appraising-development>

⁵⁵ Gross Development Value is the product of future sale price and total square metres of developed floorspace.

⁵⁶ Gross Development Costs are private developers costs, fees, and assumed developer profit.

⁵⁷ Existing Use Value is calculated using Industrial Use Value per hectare in Camden, extracted from the Valuation Office Agency, Land value estimates for policy appraisal 2019.

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function of future selling prices, is inclusive of affordability requirements. Commercial use includes office, retail and life science space. Gross Development Costs include only private developer costs and do not include public sector enabling costs. Construction costs per square metre are assumed £2,741 for residential floorspace and £3,242 for commercial floorspace. Construction costs are then uprated by an extra 50% to include professional fees.

Land value uplift is realised at the point in time in which the price that a developer would be willing to pay for the land increases. In this case, this matches the timescales of which the floorspace becomes operational, i.e., in four equal tranches across Phase 1 and 2 respectively. The Existing Use Value is assumed industrial (brownfield) at the beginning of construction in both Phase 1 and 2.⁵⁸

Land Value Uplift is calculated separately for both residential use and commercial use, reflecting the Valuation Office Authorities' categorisation of land values. Commercial land value uplift considers all office, retail and life sciences floorspace.

Taxation Impact

As a major regeneration site, with significant housing and commercial space, the Euston Regeneration will be an important generator of taxation, which is a further economic benefit. We have therefore estimated the taxation impact of regeneration to provide insights into the potential fiscal benefits for the Council (and therefore the UK), specifically in terms of Council tax and Business Rate receipts. It's essential to note that these estimates are approached from an economic perspective and they do not constitute a comprehensive financial analysis, which would necessitate additional assumptions. The assumptions presented here are at a high level and have been developed collaboratively with Camden Council. However, Metro Dynamics acknowledges that there are inevitably more complexities involved and recognises the potential for further refinement with input from the Council's Finance team.

Additionally, we are aware that alternative estimates are in progress, aiming to identify potential financial mechanisms to deliver a development that could be financially sustainable with limited or no government investment. These considerations are not part of this analysis, and we emphasise the need for further studies on the financial implications that Council tax and Business Rate uplift can provide.

Council tax receipts

The following high-level assumptions have been used to quantify market housing council tax receipts:

- all housing units assumed to be on Band D - £1,900 (2023/24 rate in Camden)
- 15% of properties expected with single occupancy and 5% vacant properties, receiving 25% rate discount

⁵⁸ DLUHC Appraisal Guide, Annex B, note B14.

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- 5% of properties expected to be occupied by students, thus receiving 100% rate discount (10% in Kings Cross, adjusted lower for Euston due to the absence of a university on-site).

For affordable housing (40% of the total homes delivered or 920 homes), the following assumptions have been made:

- all housing units assumed to be on Band D - £1,900 (2023/24 rate in Camden)
- All affordable homes receive a 45% Council Tax discount. Council Tax discount (or support) varies depending on a number of criteria which is hard to quantify at this stage of the development. The suggested 45% discount across all affordable units is a median estimate based on a discount range between 15% - 75%⁵⁹.

For both market and affordable homes, an annual increase of 2% in the council tax band has been calculated up to 2053. We recognise that this assumption is very conservative and is based on inflation increasing by 2% per year over the next 30 years. This might not be the case, given council financial pressure, which led Camden Council to raise its council tax by 4.99% in the current financial year.

The gross Council tax receipts, based on the delivery of 2,300 homes (middle figure of the 2,100-2,500 anticipated housing units), amount to £4.5 million per year when all homes have been completed (not discounted). This equates to a cumulative £93m up to 2053, or £45m in present value terms.

If a 5%, instead of 2%, increase would be maintained yearly, it could bring the amount of Council tax income per year when all homes have been completed (not discounted) up to £7.6 million per year and the total cumulative council tax figure up to £83m in present value terms by 2053.

Business Rate Receipts

The following high-level assumptions have been used to quantify potential business rate receipts:

- £600/sqm Office Rateable value per sqm (based on Kings Cross development)
- £530/sqm Retail Rateable value per sqm (based on Kings Cross development)
- 0.512 business rate standard multiplier and 0.499 small business rate multiplier. Business Rate Multipliers increase of 1% every five years has been modelled based on past experience.
- 70% of the businesses paying full business rates
- 20% of the businesses receiving small businesses / retail / charities business rate discount equivalent to 80%. The suggested 20% business proportion is the mid-point of

⁵⁹ <https://www.camden.gov.uk/council-tax-support>

the range between 5%-35%, estimated from the Camden NDR (non-domestic rate) database for the Kings Cross development⁶⁰.

- 10% of small businesses/CIC receiving 100% business rate exemption. The suggested 10% business proportion is the mid-point of the range between 5%-15%, estimated from the Camden NDR (non-domestic rate) database for the Kings Cross development⁶¹.

The gross business rate receipts, based on the delivery of 505,000 sqm of commercial and retail space, amount to £89m per year when all the commercial space have been completed (not discounted).. This equates to a cumulative £1.6bn up to 2053, or £800m in present value terms.

Discounted Impact

Compliant with economic analysis, monetised figures are calculated as present values, discounted at an annual rate of 3.5%.

All monetised figures are presented in today's prices. By using 2023 prices, this analysis makes no prediction on the future real growth of land values and GVA.

Additionality

The economic figures presented in this the report serve the purpose of demonstrating the economic activity that would be located on the site, thus contributing to the economy.

The initial figures described in the EIA are gross figures and no calculation has been made, for example, to distinguish between the extent to which jobs generated on the Euston site are net additional or displaced from elsewhere. MD accepts it is possible that several of the firms or employees to be located on the Euston site may be relocated from elsewhere in the UK. As part of following iterations of this EIA, aimed at supporting future economic case appraisals and cost-benefit analysis studies, it is suggested to include additionality consideration in the benefit calculation. Nonetheless, it is anticipated that the additionality for such development will be relatively low. This expectation is based on the projected high proportion of Foreign Direct Investment (FDI) injected into the development and the likelihood of multinational firms relocating or expanding in the area, thus bringing about a net increase in jobs. This is supported by the significant level of life science specialisation, which will be further nurtured in the area, leveraging the existing life science and innovation infrastructure around Euston and Kings Cross (refer to Figure 4). Similarly, the uplift in land value could be expected to be highly additional, with a low level of deadweight and displacement, given current challenges around housing stock provision and London's housing delivery targets.

⁶⁰ <https://opendata.camden.gov.uk/Business-Economy/Camden-Non-Domestic-Rates-Charges-and-Reliefs/xcqwxady/data>

⁶¹ <https://opendata.camden.gov.uk/Business-Economy/Camden-Non-Domestic-Rates-Charges-and-Reliefs/xcqwxady/data>

Section 5: Scenario sensitivity analysis

Earlier sections of this report have emphasised the realistic but provisional nature of the Workstream 2 scenario that forms the basis of economic outputs. Uncertainty remains over the exact scale and scope of development that will occur on the Euston site. This section explores how a range of potential adjustments to or variations of the Workstream 2 scenario may impact the economic outputs generated by the development. As such, figures are presented as the net addition to economic outputs versus as in the Workstream 2 scenario, which is treated as the 'baseline' scenario for this analysis. These figures are based on a heavily simplified set of assumptions provided by Master Development Partner, Lendlease, and are purely notional estimates made by Metro Dynamics, which are not based on formal design work or advice.

Whilst this analysis indicates the marginal impact of the variations to delivery, it does not imply that these variations are mutually exclusive. As will be expanded upon below, variation 5 is presented as an 'all in' sensitivity, which illustrates the potential economic output in the event of a combination of several of the variations presented below.

Sensitivity test 1

Wider development area - Further additional housing sites

Regent's Park Barracks, located to the north-west of Euston, has been identified as a site that could be part of the Euston site regeneration. If this site were no longer required by the Ministry of Defence (MoD), there is a potential for redevelopment. High-level, notional estimates indicate if the site was to be acquired, there would be potential for development of between 600-900 net new homes, which is subject to detailed site investigation, the LVMF, and review of listed buildings on the site. Adopting an assumption of 100 sqm GEA per housing unit, an addition of the midpoint of the range, **750 homes** would constitute 75,000 sqm of residential floorspace.

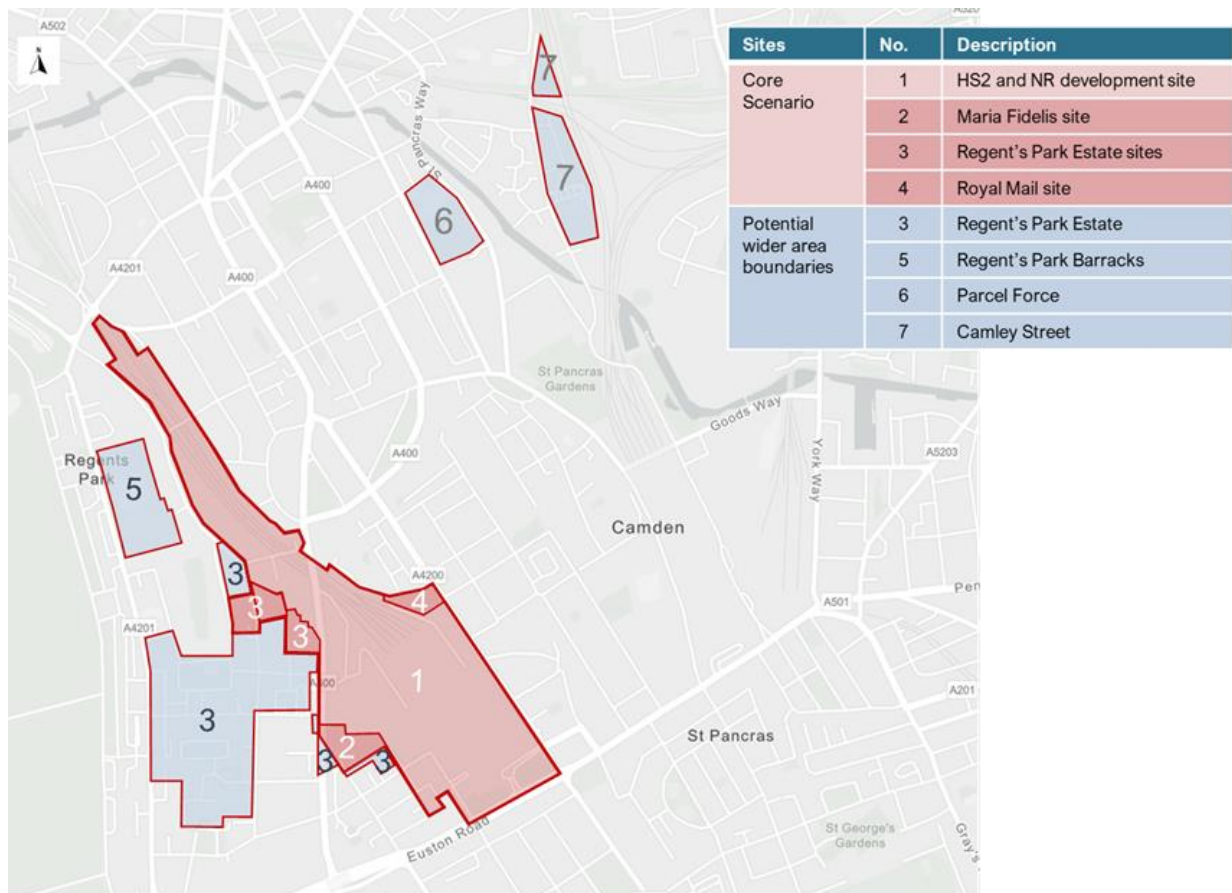
The **Parcelforce/ATS Tyre** site and 120-136 and 104-114 **Camley Street** sites, located to the north-east of Euston near Camden Town, have also been identified as prospective sites that could be added to a wider area development scenario. Assuming a 100% housing use class mix on the prospective development of these sites, these would add a combined **1,480 net new homes**. These net additional homes figures do not include the potential reprovisioning of employment floorspace that may be required due to development on these sites.

Previously mentioned was that the potential densification of parts of the **Regent's Park Estate**, as identified in the Euston Area Plan includes an estimate of between 330-630 net new homes. This wider area scenario now considers the upper bound of this range, rather than the midpoint (480) used in the core analysis. This is an additional **150 new homes** compared to the core analysis. As discussed in sections above, any proposals for redevelopment here would need to be tested and progressed in close engagement with residents. Whilst the phasing assumptions of this scenario are assumed constant with the core analysis, this too is an important aspect to consider in consultation with residents.

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A combination of the above wider area sites could generate a total of **2,380 further additional net new homes, compared to the baseline scenario**. This analysis assumes the additional Regent’s Park Estate sites could be completed in 2034, subject to the outcome of engagement with residents, and the Regent’s Park Barracks site, Camley Street and Parcelforce sites completed by 2038. All of the above sites are purely prospective estimates provided by Metro Dynamics and have not been based on detailed master planning work, nor have they been subjected to local or GLA planning policy assessment.

Figure 15. Wider area sites



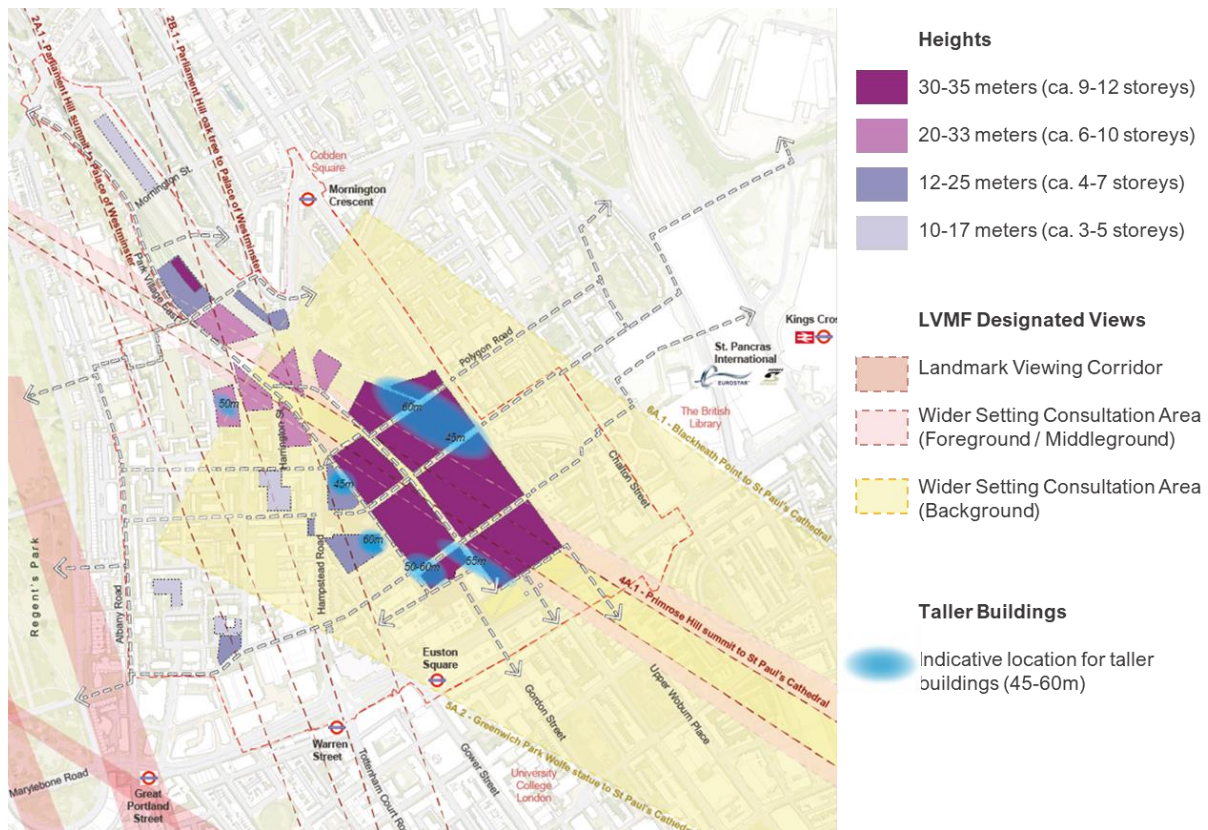
Sensitivity test 2

Taller development - Construction of office block above LVMF height limits

The London View Management Framework (LVMF) preserves viewing corridors towards designated Strategically Important Landmarks which are protected in policy HC4 of the London Plan. As shown in Figure 15, four viewing corridors run over the Euston regeneration site. The three corridors shaded in pink, labelled 'foreground assessment area', are between Primrose Hill and St Pauls' Cathedral (left to right) and between Parliament Hill and Palace of Westminster (both top to bottom). The yellow shaded area is Wider Setting Consultation Area, which forms part of a Protected

Vista, a geometrically defined area⁶² that in this instance represents the falling sight line between Blackheath Point and St Paul’s Cathedral. This effectively means the yellow shaded area represents the restriction of building in to the vertical space behind St Paul’s Cathedral to protect the viewing corridor between Blackheath Point and St Paul’s Cathedral. All development that exceeds the threshold plane of the Protected Vista will be subject to specific visual management Guidance and consultation and referral procedures with the GLA.

Figure 16. Illustrative masterplan to show potential general building heights and Protected Vistas – these are indicative only, and are assuming storey heights from an average ground level (Proposed Updated Euston Area Plan, 2023)



The Euston development site lies within the yellow shaded Wider Setting Consultation Area. In accordance with the LVMF, building heights could range between 45-60m (circa 14-18 storeys). The corridors in view of the Palace of Westminster are represented by additional planning restrictions, due to its designation as a UNESCO World Heritage Site.

Notional, desk-based estimates, informed purely for this sensitivity analysis by the Master Development Partner Lendlease, indicate that the construction of a very tall commercial

⁶² London Plan 2021, Section 7.4.1, Protected Vistas

building (notionally labelled 'South Tower') on the south side of the station would likely be located within the viewing corridor between Parliament Hill and Palace of Westminster. Under this scenario a 'South Tower' would be completed by 2034, and would provide a net additional 40,000 sqm of commercial floorspace, increasing the number of storeys on the south side of the station from circa 14-18 storeys to 42 storeys. For simplicity, this is assumed to be 100% office use class, with no retail or life sciences floorspace.

It is important to emphasise that, in the absence of an assessment of a detailed proposal, the potential for a 42-storey tall building in this area is purely hypothetical at this stage and is provided for the purpose of testing development variations. Assessing the feasibility and impact of such high-rise development on designated heritage assets would require formal planning discussion with key stakeholders and statutory consultees, including but not limited to Camden Council, the Greater London Authority, Transport for London and the Department for Transport.

Sensitivity test 3

Quicker development - Accelerating Workstream 2 timescales

This sensitivity includes no alteration to the Workstream 2 scenario other than an acceleration of development timelines. Construction is reduced from 27 years to 16 years. Phase 1 is assumed to occur across 2027-38, Phase 2 across 2031-42. Benefits are still assumed to be delivered in four equal tranches of three years each across each phase respectively. The appraisal period remains between 2023-2053.

Sensitivity test 4

'All in' - Quicker, wider, and taller development

Whilst Metro Dynamics has analysed the marginal economic impact of each scenario variation above, these variations are not mutually exclusive. Figures 17 and 18 illustrate the GVA and land value uplift of an 'all in' scenario, which combines the Quicker delivery (accelerated development), Wider development (further additional housing sites), and Taller development (South Tower) variations. Please note the wider development sensitivity does not feature in Figure 17 as it does not generate a commercial impact.

Sensitivity test 5

Smaller development, larger train station - 'Rev T2 minus' scenario

Government departments have not yet confirmed the exact footprint of the Euston station once completed. As such, uncertainty remains over the number of platforms, size of the concourse, and degree of integration between the Network Rail and High Speed Two stations. Indeed, there remains a possibility of a larger station than that assumed as part of the Workstream 2 scenario, including the possible safeguarding of space for future expansion.

This sensitivity analysis is based on initial masterplanning work, which was presented in the 2021 HS2 Sprint Report prepared by HS2, Network Rail and the Euston Partnership. Labelled by stakeholders as the 'Rev T2 Masterplan', this scenario featured a larger train

station and a reduced scale of Adjacent Station Development, limiting the available space for commercial and residential regeneration. This Rev T2 scenario featured a bigger Over Station Development and challenged current height restrictions dictated by London's protected lines of sight under the Local View Management Framework (LVMF) planning regulations. In response to this, a 'Rev T2 Minus' scenario, featuring lower OSD development and reduced LVMF risk, has therefore been considered for this sensitivity testing.

The nature of the design requirements needed to make this approach feasible means that the total deliverable floorspace is 494,600 sqm GEA, which is significantly less than the 723,900 sqm GEA in the baseline scenario. The proportion of residential and commercial floorspace is kept constant. Additional sites have not been considered under this scenario. A full breakdown of the reduction in residential and commercial space is given in Table 10.

Whilst this analysis presents the Rev T2 minus scenario with reduced level of regeneration development and economic benefits compared to alternatives with larger Adjacent Station Development, this analysis does not take in to account the potential enhanced economic connectivity benefits of a larger station area, which could also play a significant role in value for money considerations. This reaffirms the importance of viewing this impact assessment as an integral component of a broader impact assessment model which not only captures the potential benefits generated by the Euston area regeneration, but also consider the positive implications associated with the HS2 station development and the enhanced connectivity throughout the UK.

Sensitivity tests - Economic Impact Analysis

An economic impact analysis of each variation of the Workstream 2 'baseline scenario' is presented below. Table 10 presents the additional floorspace, land value uplift, and job creation uplift of each scenario versus the baseline scenario. Figure 17 illustrates the total cumulative GVA impact of each scenario variation, compared against the baseline scenario. Figure 18 indicates the total cumulative land value uplift of each scenario variation, compared against the baseline scenario. Figure 19 presents the cumulative total combined business rates and council tax receipts generated by each scenario variation. All monetary figures are discounted present values in current (2023) prices. GVA figures are commercial only, and inclusive of direct, indirect and induced GVA, unless stated otherwise, and exclude construction activity, unless stated otherwise. Commercial economic output refers to the total output created by all office, retail and life sciences use classes. Figures are rounded to the nearest £10m where relevant.

An accelerated development sensitivity would bring forward the economic benefits of development. This would be such that by the end of 2033, the development would have generated a cumulative impact of £4bn, compared to £2bn in the baseline scenario, and by the end of 2042, an impact of £24bn, compared to £15bn in the baseline scenario. As the site would be fully occupied earlier, the rate of increase in benefit accrual would be slower between this point and the end of the baseline construction in 2053, but the overall level of benefits would remain higher indefinitely. Land value uplift is also £190m larger than in the baseline due to a lower deduction to time discounting. Cumulative Council Tax and Business Rate receipts increase by £249m by 2053.

The **South Tower** (42-storey commercial building) also creates a larger economic impact than the baseline Workstream 2 scenario. Upon an assumed completion in 2034, the addition of 40,000 sqm of commercial floorspace would be expected to create 2,100 additional direct jobs, and 1,300 additional wider economy (indirect and induced) jobs. The economic output generated by these would accumulate over time, such that by 2043, the Euston development would have generated a cumulative GVA of £21bn, compared to £18bn in the baseline scenario, and in 2053, would have generated £46bn, compared to £41bn in the baseline scenario. This would also increase commercial land value uplift by an additional £60m. Cumulative Council Tax and Business Rate receipts increase by £115m by 2053.

The **further additional housing sites** do not create a commercial impact in terms of GVA or jobs (hence are not depicted on Figure 17). They do however create 4,680 total new homes, 2,380 larger than the baseline scenario, and a total land value uplift of £2.5bn, £1.1bn larger than baseline scenario. Cumulative Council Tax and Business Rate receipts increase by £51m by 2053.

The **all-in** sensitivity creates the largest economic benefit. With a larger amount of residential and commercial floorspace, and a quicker delivery timespan, it produces larger outcomes in terms of residential units built, land value uplift, jobs and GVA. This totals 4,680 total new homes, £2.8bn land value uplift, 23,000 direct and 14,000 indirect commercial jobs, and a cumulative £48bn GVA by 2053. Cumulative Council Tax and Business Rate receipts increase by £385m by 2053.

The **smaller development/larger station** scenario creates a lower economic impact than the baseline scenario. The removal of residential and commercial floorspace leads to a reduction of 860 net new homes, £570m of land value uplift, over 10,000 jobs, and £16bn of GVA uplift over the period to 2053. It is possible that some of this effect could be offset by incorporating larger towers into the design, however this hasn't been tested as part of this work. Cumulative Council Tax and Business Rate receipts reduce by of £322m by 2053.

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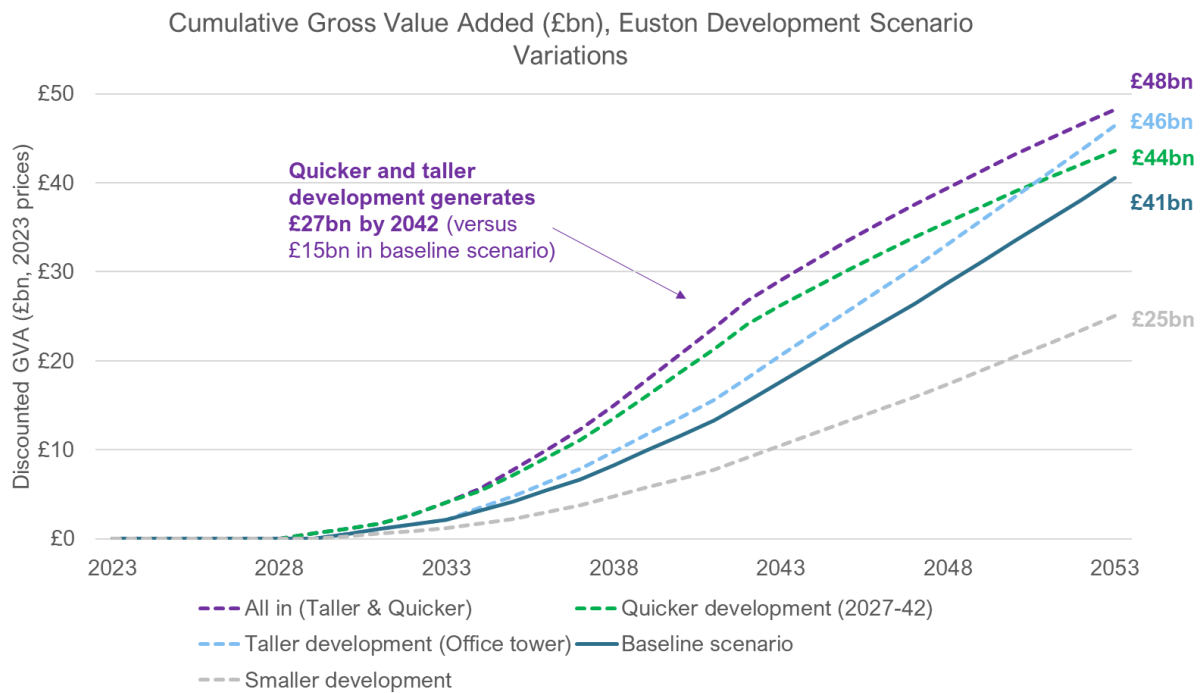
Table 10. Estimated output figures for Workstream 2 Baseline Core scenario and variations of the Workstream 2 scenario⁶³

	0 - WS2 Baseline Core Scenario	1 - Wider Development Area (Additional housing sites) ⁶⁴	2 - Taller Development (Office Tower) ⁶⁵	3 - Accelerated development (2027-2042)	4 - 'All in' variation	5- Smaller development/Larger station
Residential floorspace	219,000 sqm GEA	Further 238,150 sqm	N/A	N/A	Further 238,150 sqm	Reduction of 75,000 sqm
Resi Units	2,300 (2,100 to 2,500 units)	Further 2,380 units	N/A	N/A	Further 2,380 units	Reduction of 860 units
Resi Land Value Uplift	£857m	Further £1,090m	N/A	Further £120m	Further £1,290m	Reduction of £350m
Commercial and Retail floorspace	503,000 sqm GEA	N/A	Further 40,000 sqm	N/A	Further 40,000 sqm	Reduction of 155,000 sqm
Commercial Land Value Uplift	£555m	N/A	Further £60m	Further £70m	Further £138m	Reduction of £220m
Jobs	21,000 direct, and 13,000 wider economy commercial jobs	No commercial job impact	Further 2,100 direct commercial jobs, 1,260 indirect and induced commercial jobs	No change in total number of jobs, but job creation brought forward	Further 2,100 direct commercial jobs, 1,260 indirect and induced commercial jobs	Reduction of 6,400 direct, and 4,100 indirect and induced, commercial jobs
Business Rates and Council Tax	£45m cumulative CTax Receipts in PV terms by 2053 and £800m cumulative BR Receipts in PV terms by 2053	Further £51m	Further £115m	Further £249m	Further £385m	Reduction of £322m

⁶³ Commercial occupancy and employment density assumptions remain constant across scenario variations.

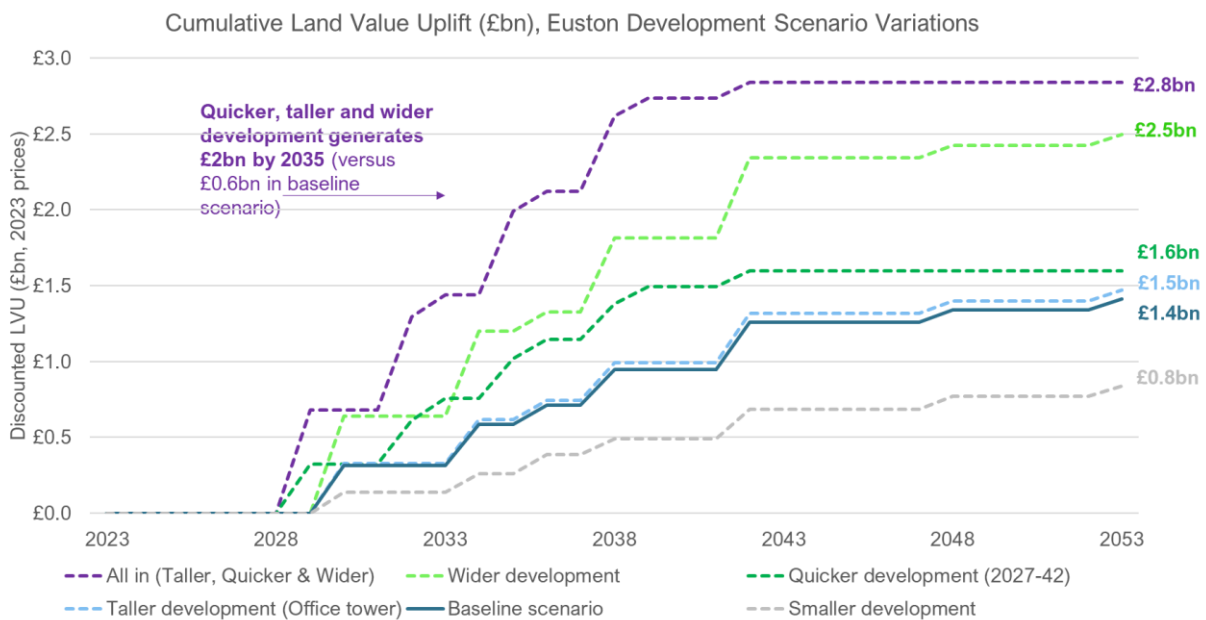
⁶⁴ All assumptions built in to previous land value calculations are kept constant, including affordable housing ratio and selling prices. Where there are wider area sites, existing Use Values are adjusted as per the hectareage of those sites. In the interests of simplicity, construction costs are held constant between the baseline scenario and sensitivities. However, Metro Dynamics acknowledges that were more detailed information to become available, this could be used to update construction cost assumptions for sensitivities.

Figure 17. Estimated Cumulative GVA impact for a set of Workstream 2 variations⁶⁶



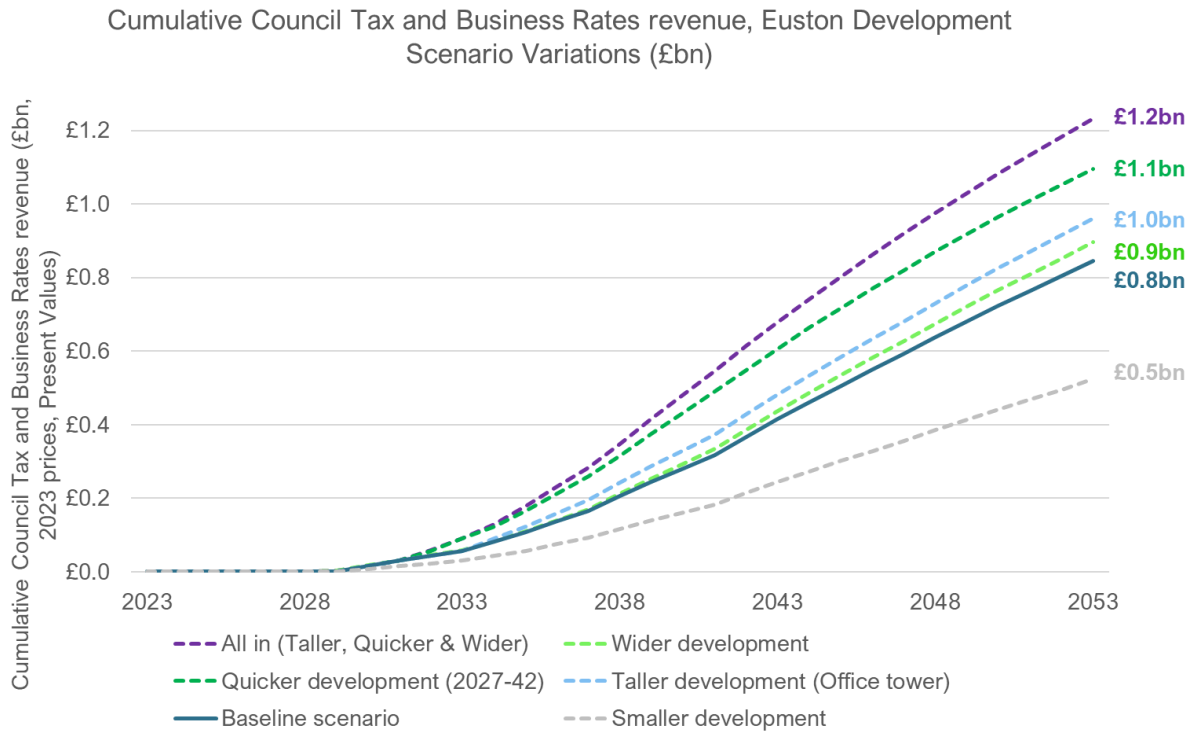
The wider development (further additional housing sites) sensitivity has not been included in this chart because it does not generate an additional commercial (office, retail or life sciences) economic output versus the baseline Workstream 2 scenario.

Figure 18. Estimated Cumulative Land Value Uplift for a set of Workstream 2 variations



⁶⁶ GVA figures are inclusive of direct, indirect and induced GVA, and exclusive of construction activity.

Figure 19. Estimated Cumulative Council Tax and Business Rates revenue (present value terms) for a set of Workstream 2 variations



Metro Dynamics reiterates that the variations presented as part of this section’s Sensitivity Analysis are based on variations in the assumptions provided by the Master Development partner and are purely notional estimates made by Metro Dynamics. These variations of the core scenario serve as a means to test how the current Workstream 2 scenario could be stretched to improve impact. Importantly, they are not grounded in any masterplan work or detailed design work. To be realistically implemented, these variations might require adaptation and changes in requirements from the London Plan guidance and planning authority, which have not been tested at this stage. Metro Dynamics acknowledges the inherent complexities involved and recognises the potential for further refinement. As design work over the station and regeneration area progresses, there will be opportunities to revisit these assumptions and refine or develop further sensitivities. Nevertheless, this analysis demonstrates that, under reasonable assumptions, Euston holds the potential to deliver considerable economic output to the surrounding area and to London as a whole.

Appendix A – Testing Occupancy Rate

The calculation of Employment and GVA outputs relies not only on the floorspace and the timing of delivery phases but also on the projected occupancy rate. The delivery of floorspace and its phasing are the best estimates provided by the developers, which will become more defined in later development stages as master planning progresses. The occupancy rate assumptions have been estimated by Metro Dynamics, set at 97%, and are based on benchmark neighbouring developments at Kings Cross and historical data.

To account for a less optimistic scenario, a sensitivity analysis has been introduced to assess the impact of lowering the occupancy rate to 85%, resulting in a 15% vacancy rate. It's important to note that for the purpose of this sensitivity test, this vacancy rate is deliberately set lower than the latest Q3 2023 central London vacancy rate estimates (at 9.5%) and the 5-year vacancy rate average (at 7.5%)⁶⁷.

The table below illustrate total jobs and GVA figures assuming a lower 85% occupancy rate.

Table 11. Estimated Jobs and GVA for a lower occupancy rate under Workstream 2 scenario

	WS2 Baseline Core Scenario	WS2 with lower occupancy rate
Occupancy rate	@97%	@85%
Commercial and Retail floorspace	503,000 sqm GEA	No change
Jobs	21,000 direct and 13,000 jobs in the wider economy	18,000 direct and 11,500 jobs in the wider economy
GVA	£2.5bn GVA per annum and £41bn accumulated GVA by 2053	£2.2bn GVA per annum and £36bn accumulated GVA by 2053

Even with a lower occupancy, the development will still generate significant economic benefits. There is no expected reduction in land value uplift, as long as the quality and quantity of the space delivered remain consistent.

⁶⁷ JLL, 2023 Central London Office Market Report

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