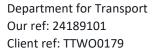
King's Cross and St Pancras Wider Impacts of Station Investment







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Contents

Exe	ecutive summary	i
	Study Remit	i
	Study Approach	i
1	Introduction	1
	The scheme	1
	Structure of this report	1
2	Approach to this study	3
	Purpose	3
	Scope, method and limitations	3
	Study area boundary	5
	Case study evidence plan	6
	Selecting comparator areas	9
3	Redevelopment context of the King's Cross St Pancras area	17
	The King's Cross St Pancras area	17
	Timeline of key decisions	18
	Rationale for intervention	20
	Perceptions on how the study area has evolved	32
4	Theory of Change	34
5	Transport outputs and benefits	40
	Conventional transport benefits	40
	Evolution of demand at King's Cross and St Pancras stations	41
6	Retail impacts	45
	St Pancras retail offer	45
	King's Cross retail offer	46
	Comparative analysis of retail rent values and stock	47
7	Regeneration impacts: Property, jobs and GVA	51
	Approach for the impact assessment	51
	Commercial property	52
	Developments and planning consents	61



8	Conclusions	75
	Evidencing the transmission mechanisms postulated on the Theory of Change	71
	Displacement	68
	GVA	65
	Employment	62

Appendices

- A King's Cross Place Plan
- B Additional detail underpinning the context and rationale of the interventions
- C Summary of changes to National Rail and London Underground services
- D Detailed development analysis

Figures

Figure 2.1: Study boundary area	. 6
Figure 2.2: Central London office markets	10
Figure 3.1: Map of the King's Cross St Pancras area	18
Figure 3.2: Timeline of key decisions/milestones	19
Figure 3.3: King's Cross lands and rail works2	21
Figure 3.4: King's Cross Opportunity Area identified in the 2004 London Plan	25
Figure 3.5: Central Activities Zone	27
Figure 3.6: Underutilised railway lands behind King's Cross station, 2000	28
Figure 3.7: Argent masterplan, 20072	29
Figure 3.8: Current layout of King's Cross station	31
Figure 3.9: St Pancras International and King's Cross stations in 2006 (left) and 2020 (right) \overline{s}	33
Figure 4.1: Logic map underpinning Theory of Change linked to investment at King's Cross and St Pancras	
Figure 4.2: Transmission mechanisms	37
Figure 4.3: Virtuous circle of transport investment and development	39
Figure 5.1: ORR station count data, King's Cross/St Pancras/Euston/Paddington, 2004-2019 . 4	41
Figure 5.2: London Underground Entries and Exits, King's Cross St Pancras/Euston/Old St/Paddington, 2007-20194	42



Figure 5.3: Indexed London Underground Entries and Exits, King's Cross St Pancras/Euston/ St/Paddington, 2007-2019	
Figure 6.1: Overall satisfaction with Network Rail managed stations, Spring 2020	45
Figure 6.2: Rating of choice of shops/eating/drinking facilities available at passenger origin stations, Spring 2020	46
Figure 6.3: Retail Market Performance 2011-2021	48
Figure 6.4: Retail Space Vacancy 2011-2021	50
Figure 7.1: Zones within the Study Area	52
Figure 7.2: Floorspace in Zone 1	53
Figure 7.3: Floorspace in Zone 1 as a percentage of the scope area	53
Figure 7.4: Rateable value per square metre in all sectors	54
Figure 7.5: Rateable value per square metre in the office sector	55
Figure 7.6: Office Market Performance (2011-2021)	57
Figure 7.7: Office Space Vacancy – 2011-2021	58
Figure 7.8: Residential Market Performance – Average Values (2011-2021)	60
Figure 7.9: Residential Market Performance – Values per Square Metre (2011-2021)	61
Figure 7.10: Total employment in the scope area, 2009-2019	63
Figure 7.11: Employment by main sectors in Zone 1	64
Figure 7.12: Growth in GVA across all Zones	66
Figure 7.13: Growth in GVA across all comparator rail stations	66
Figure 7.14: GVA per worker, 2009-2019	67
Figure 7.15: GVA per worker, 2019, across London termini	68
Tables Tables	
Table 2.1: Evidence used to inform station impacts	8
Table 2.2: Evidence used to inform wider area impacts	8
Table 2.3: Evidence used to inform wider area impact	11
Table 6.1: Summary Retail Market Data	50
Table 7.1: Classification of study area Zones	51
Table 7.2: Office Market Summary Data	59



Glossary

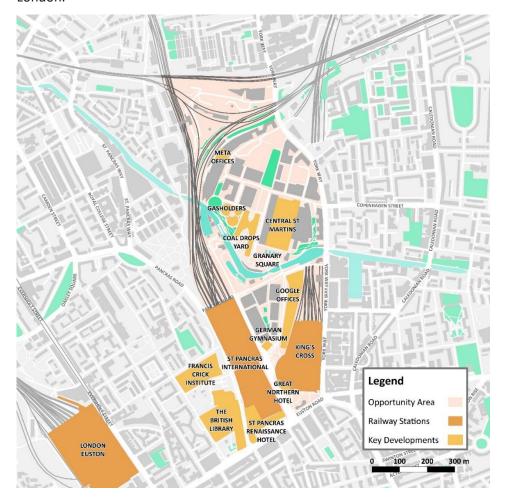
Abbreviation	Term
ATO	Automatic Train Operation
CAZ	Central Activities Zone
EMR	East Midlands Railway
HS1	High Speed 1
IMD	Index of Multiple Deprivation
KCCLP	King's Cross Central Limited Partnership
LNER	London North Eastern Railway
LRC	London Regeneration Consortium
LSOA	Lower Layer Super Output Area
LU	London Underground
MSOA	Middle Layer Super Output Area
OA	Opportunity Area
ORR	Office of Rail and Road
TOD	Transit Oriented Development
tpd	trains per day
tph	trains per hour
TfL	Transport for London



Executive summary

Study Remit

King's Cross and St Pancras stations, and the area around them, have seen a transformational change over the last two decades. This has been driven by the programme of enhancements to rail and underground services serving these two termini, the redevelopment of the stations and the regeneration of the brownfield land north of King's Cross into a vibrant and iconic area in London.



This commission aimed to explore the main drivers for change – including investment in stations and wider regeneration initiatives – and how these contributed to a range of social and economic impacts in the area. These impacts include growth in the supply and value of commercial floorspace, delivery of large-scale housing developments and growth of economic output and employment in the area.

Study Approach

This report provides a case study of the redevelopment of King's Cross and St Pancras stations and the regeneration that has taken place around them. The study identifies the main drivers for change, measures the social and economic impacts that these had on the area, its economy and its residents and workers, and demonstrates how both drivers and impacts are linked using the Theory of Change.



To study the impacts in the King's Cross St Pancras area, we set out a Theory of Change, based on our understanding of the context, documentation review and stakeholder interviews; this Theory of Change was then evidenced and tested iteratively by evidence and data, as well as input from industry peers and stakeholders.

The data analysis used to evidence the Theory of Change included a selection of metrics, such as GVA, number and type of jobs, impacts on retail offer, and supply and value of commercial and residential property. The evolution of these around King's Cross/St Pancras was measured over time and was compared against their evolution on selected comparator areas.

The study looked at the impact of station investment around King' Cross/St Pancras at three geographic levels:

- A boundary constituted by the stations' perimeters, outlined in red in the figure below;
- A second 'hard boundary' constituted by the King's Cross Opportunity Area (OA), which was comprised of brownfield land to be redeveloped, outlined in green; and
- A third 'soft boundary' where it is anticipated that certain spill over impacts would have taken place as a result of investment within the hard boundary, outlined in blue.

Three London termini were used as comparator areas, as they share key characteristics with King's Cross/St Pancras – Paddington, Euston and Old Street/Shoreditch – alongside Camden Borough, the Tech Belt (spanning between Camden through to Shoreditch) and Central London.

Drivers for Change and Rationale for Intervention

Three drivers for change were established based on stakeholder interviews and documentation review: investment in rail infrastructure to accommodate future demand growth; the opportunity to redevelop brownfield land north of King's Cross at a premium central London location; and the need to invest at both King's Cross and St Pancras stations to convert them into gateways into the area and London.

These drivers for change both reflect and inform the 'Theory of Change', which seeks to identify the potential causal linkages between the drivers and resultant outcomes (such as changes in the supply and value of commercial floorspace or increase in the number and types of jobs) and impacts (such as wider economic and regeneration impacts).

Improvements to rail connectivity and accessibility, as well as the need to provide additional rail capacity to accommodate future demand, led to the programme of rail enhancements that included the arrival of domestic and international high-speed services at St Pancras, the Thameslink programme and enhancements to London Underground.

This programme unlocked the opportunity to redevelop the large brownfield site in the Opportunity Area¹ north of King's Cross. This site presented unique characteristics in terms of its scale, premium location in Central London and levels of connectivity for a transport hub.

In this context, there was a capacity-led imperative to invest at King's Cross and St Pancras stations to accommodate growth in rail demand and development-led growth. The imperative to redevelop King's Cross and St Pancras created the opportunity to create 'gateways' providing

¹ Key locations with potential for new homes, jobs and infrastructure of all types, identified in the Mayor's London Plan.



the architectural quality, integrated public realm and local connectivity that would help realise the benefits of rail enhancements and wider regeneration.

Assessment of impacts

The assessment of the impacts of investment demonstrates the transformation of the area, beyond other comparable stations (including Old Street, Paddington and Euston) and areas in Central London (including the Tech Belt)². The summary below reports the changes and impacts that took place within the King's Cross Opportunity Area:

- Office market: floorspace increased by over 3.5 times and value per square metre by over 2.5 times between 2010 and 2019. This has been higher than in comparable stations, such as Old Street or Euston, as well as Central London and the Tech Belt, with lower vacancy rates too. This includes changes in stock (138% growth between 2011 and 2021, compared to less than 30% for all other locations), changes in rent prices (124% growth, followed by Old Street and Euston) and demonstrating low and stable, vacancy rates (around 3%, compared to around 5% in Paddington, 8% in Old Street and 7% in the Tech Belt and Central London). This reflects the fact that the area is very well connected and delivers high quality space and environment that is able to attract and retain talent.
- Residential market: growth in residential property values has been the highest at the King's Cross/St Pancras area among the study and comparator areas i.e., 125% growth in property values between 2011 and 2021, compared to Paddington (c. 55%), Old Street (c. 60%) and Euston (c. 90%). This is also the case for the values per square metre, with growth at King's Cross being 112% in the same period, compared with c. 35%, 40% and 55% at Paddington, Euston and Old Street respectively.
- **Employment**: growth in the number of jobs in the OA between 2009 and 2019 has been substantial, with the creation of around 19,000 new jobs and the number of jobs trebling from around 8,700 to 27,700 jobs. These jobs mainly corresponded to the information and communication, professional, scientific and technical areas and to some extent accommodation and food services. This demonstrates that investment in the area is likely to have attracted a highly skilled pool of employers and employees, higher than in comparator locations.
- **Economic output and productivity**: growth in economic output has also been higher around King's Cross than in the comparator areas, with GVA growing over 300% between 2011 and 2019 in the OA, compared with around 145%, 85% and 40% growth in Euston, Paddington and Old Street respectively. Productivity, measured as GVA per worker, also increased in the area, whereas it remained flat in comparable areas.

A proportion of these impacts are anticipated to be net additional, where some others are likely to have led to displacement within the UK and London. With respect to highly skilled international firms that have located in the area, these tend to consider their business locations

² The impacts around the King's Cross St Pancras area have been assessed in the Opportunity Area, as well as in the areas in its vicinity. Other London termini, as well as the Tech Belt (spanning between Camden and Whitechapel) and Central London have been used as comparators for the impacts assessed.



at an international level, so in the absence of a central, well-connected location in London, they would have considered to locate elsewhere in Europe. The area has become a focus for technology companies, such as Google and Meta as well as numerous smaller companies, to locate. For these firms, King's Cross OA provides a combination of land availability (for large-scale office development), national and international transport accessibility, quality of urban environment and setting within the wider Tech Belt, that supports their decision to locate and invest. These impacts are considered likely to be largely net additional, and also contribute to underpinning the high comparative GVA in the area. On the other hand, increases in rent prices might have led to previous residents and local businesses to be displaced and move to other areas, as an impact of gentrification of the area.

Establishing the causal relationships between drivers for change and impacts

The data analysis was used to evidence the Theory of Change that was postulated on the basis of the stakeholder interviews and the documentation review. This showed that the improvements in accessibility, connectivity and more widely the attractiveness of the area were part of a virtuous circle, whereby each of the enhancements acted as a catalyst to increase the attractiveness of the hub for residents, visitors and businesses. However, as part of this study, it was not possible to isolate the impact of each of the individual drivers for change.

As such, an improved rail connectivity attracted employers to the area, who could attract employees from an expanded labour market pool, supply chain and customer base. In addition, investment made the area more attractive for developers, who benefited from higher value properties and a more economically functional area, as well workers, visitors and residents, for whom the area has become more accessible and attractive.

The relocation of employers mainly related to the technology and biotech sectors, coupled with the decision to locate the University of Arts at King's Cross, provided a different focus and identity to the area and contributed to the change in perception that the area has gone through. This contributed to the place-making function of the area and its conversion to a destination in its own right, both for residents but also for visitors, which was supported by the design of the stations and public realm.

Findings of the study

This study shows that the combination of additional connectivity, land redevelopment and investment at the stations appears to have had a substantial impact in transforming the area into a high functioning premium location in London for employers, developers, residents and visitors.

Growth was higher in the study area than was observed in the comparator locations and stations examined. This was likely due to the catalytic effects of combining the three strategic drivers, given that the other locations did not have all the unique combination of success factors – transformed strategic connectivity, land availability, high-quality station and public realm redevelopment – identified for the King's Cross St Pancras area.



1 Introduction

The scheme

- 1.1 London's major stations have seen material investment over the last two decades. These investments have stimulated or been supported by inward investment in the neighbouring station hinterland.
- One of the potentially most transformative in nature has been the investment in and around St Pancras and King's Cross stations, with the introduction of new services and increased capacity (domestic and international, as described in Annex C); signature commercial, education, sciences and recreational investments; the creation of new housing; and urban regeneration on brownfield sites.
- 1.3 In the area around these stations, the development at and between King's Cross and St Pancras stands out. It has contributed to a material impact on this part of London including regenerating industrial land, creating a new focus for life sciences and research, providing new housing and offering a new urban district for recreation.
- 1.4 This development has grown organically over two decades, as described by stakeholders later on in the report, and has benefitted from new services providing both new access and improved connectivity to parts of the Home Counties and continental Europe but, at the same time, has also contributed to the success of these transport services.
- 1.5 This study provides a case study of the redevelopment of King's Cross and St Pancras stations and the regeneration that has taken place around them; it identifies the main drivers for change, measures the social and economic impacts that these had on the area, its economy and its residents and workers, and demonstrates how both drivers and impacts are linked using the Theory of Change.

Structure of this report

- 1.6 This report presents the findings of the case study of investment at King's Cross and St Pancras stations and regeneration in the wider area and is structured as follows:
 - Chapter 1, this Chapter, introduces the scheme and structure of the report;
 - Chapter 2 presents our approach to the study;
 - Chapter 3 describes the context in which King's Cross and St Pancras evolved and changed following investment in and around them;
 - Chapter 4 postulates a Theory of Change for the impacts in the study area;
 - Chapter 5 describes the transport outputs and benefits of the investment, corresponding to TAG's Level 1 benefits;
 - Chapter 6 describes the retail-related impacts of the scheme;
 - Chapter 7 describes the regeneration-related impacts of the scheme, including on commercial offer, jobs and GVA, and links these with the Theory of Change postulated in Chapter 4; and



• Chapter 8 outlines our conclusions, key findings, and recommendations.



2 Approach to this study

Purpose

- 2.1 The purpose of this study is to understand the impacts of investment at King's Cross and St Pancras stations and regeneration in the wider area, providing evidence to assess whether and how such investment has led to changes in the commercial, educational and recreational offer in and around these stations.
- 2.2 As such, the study seeks to:
 - Establish the potential causal mechanisms between drivers of change and impacts, postulating a Theory of Change which links investment at the stations with the observed impacts in the wider area; and
 - Provide evidence, quantified where possible, that underpins the mechanisms that have been presented in the Theory of Change and which can be used to inform future business cases about major station investment.

Scope, method and limitations

Scope

- 2.3 This study seeks to assess the economic and social impact of the programme of investment and regeneration that took place in the King's Cross St Pancras area. The functional scope of the study therefore includes the investment/redevelopment at the station and around the station (i.e. regeneration programme).
- 2.4 To do that, we have investigated the impacts related to regeneration in the wider area as well as King's Cross and St Pancras stations redevelopment and how these together led to changes in economic output, employment, level of development, as well as the perception of the area.
- 2.5 No business case (i.e. Investment Appraisal preceding approval) or Monitoring & Evaluation Plan has been identified for either the regeneration of the area or for the station redevelopment investment, so we have had to postulate a Theory of Change based on our understanding of the programme's objectives and its ultimate impacts, and then provide evidence that supports the transmission mechanisms that underpins it.
- 2.6 Whilst the changes to the transport offer at King's Cross and St Pancras (i.e. improvements to rail and London Underground (LU) services) were a significant driver of change in the area, as explained in the report, this study does not specifically examine the impacts of improvements to the transport offer, but rather the overarching impact of rail improvements together with regeneration and station redevelopment that led to the transformational change in the area.

Method

2.7 To study the impacts in the King's Cross St Pancras area, we set out a Theory of Change, based on our understanding of the context, documentation review and stakeholder interviews; this



Theory of Change was then evidenced and tested iteratively by evidence and data, as well as input from industry peers and stakeholders.

Data collection and analysis

- 2.8 We analysed different sources of data to inform the analysis undertaken as part of this study. This included reviewing relevant documentation, interviewing stakeholders (including at Network Rail and Camden borough), analysing data and studying comparators. To gain better insight into the regeneration of the King's Cross St Pancras area, Steer also carried out a site visit.
- 2.9 The data we have analysed comes from a variety of sources including, but not limited to, the Office for National Statistics; the Valuation Office Agency; London Underground Limited; Office of Rail and Road (ORR); and CoStar for commercial property related data. This is described in more detail below in this Chapter (see paragraph 2.26 onwards).

Approach for analysis

- 2.10 The data and evidence outlined above and described in more detail later on in this Chapter was analysed to inform the study.
- 2.11 The documentation review and the interviews held with stakeholders were used to postulate a Theory of Change for the scheme, including the key drivers for change. Then, quantitative data was analysed to evidence the hypotheses postulated by (1) analysing the evolution over time of key metrics around King's Cross St Pancras (see list of metrics in data section below) and (2) undertaking comparative analysis with suitable comparator stations in London. This approach is further described below.
- 2.12 Our findings then sought to establish the causal linkages between investment at the stations and changes in property values, employment (number and types of jobs) and GVA, within the context of the strategic drivers set out in the Theory of Change. The observed impacts correspond not only to station investments but also to improvements to the transport offer and wider regeneration in the area.

Limitations

- 2.13 As mentioned above, absence of a business case and/or Monitoring & Evaluation Plan for the station investments and regeneration means that no baseline has been defined against which to compare what would have happened had the station investments not taken place. Whilst data from areas surrounding other London termini is used as part of the study, there are no perfect comparators, as other contextual factors will also affect the evolution of GVA, employment and amenity benefits across London,.
- Also, in addition to using quantitative data where available, the narrative is supplemented with evidence from stakeholder interviews Steer carried out (noting that, whilst interviews do not provide evidence of the evolution of metrics, as quantitative data analysis does, they provide useful insight into the potential drivers of change and evolutions of perception of the area that inform the narrative). Many of these stakeholders were involved in the development of the scheme at the time it was being planned or developed.
- 2.15 Further detail on the stakeholders interviewed can be found under the 'case study evidence plan' later in this Chapter. Stakeholder views are subjective in nature but useful to provide insight into the drivers of changes; therefore input from stakeholders is treated differently to analysis of quantitative data and highlighted in the report to acknowledge this. Stakeholders'



views are their own and might not represent organisational views, particularly as they were involved in the scheme a number of years ago. We note that other groups of interest, such as local residents and business owners, could be interviewed as part of any future study to add to the findings of this report.

2.16 Finally, given that a number of overlapping investments took place at the same time, it is difficult to attribute the overall impacts to individual schemes, such as rail enhancements or regeneration projects. While acknowledging that definitive causal attribution of impacts to the drivers is not possible and wider contextual factors may also have had a role in leading to the impacts observed, the approach adopted, which takes a holistic view of the impacts in the area, allows us to compare these impacts with those from other comparator locations.

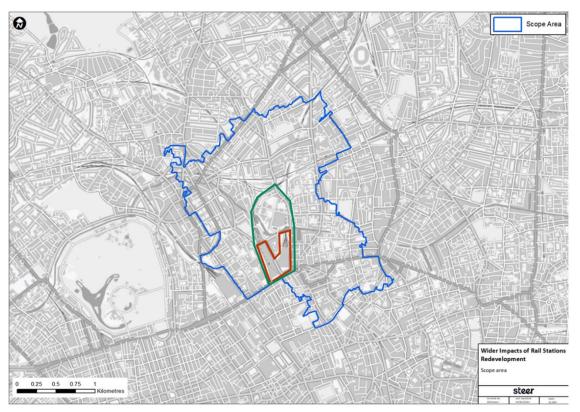
Study area boundary

- 2.17 A geographical study area needs to be defined to undertake the analysis. For this, three subsequent boundaries have been considered. These are described below and presented in Figure 2.1:
 - A boundary constituted by the stations' perimeters, outlined in red in the figure below;
 - A second 'hard boundary' constituted by the King's Cross Opportunity Area (OA), which was comprised of brownfield land to be redeveloped, outlined in green; and
 - A third 'soft boundary' where it is anticipated that certain spill over impacts would have taken place as a result of investment within the hard boundary, outlined in blue.
- 2.18 There is not a prescriptive definition for the study area soft boundary, given the fluid nature of the built environment around the OA. Therefore, an indicative boundary around the OA has been presented below, based on the local communities which were expected to be impacted by the area regeneration as described in the King's Cross: Shaping the Future study 2012³. A map of the place plan has been included in **Appendix A.** The study area has been constructed by using Middle Layer Super Output Area (MSOA) boundaries, defined to best represent and reflect the study area boundaries.
- 2.19 This definition of the boundary area has its limitations. Being based on the local communities anticipated to be impacted as described in the study referenced above, it does not consider the area to the south west of Euston Road, although arguably this was an originally more developed area than the rest of the study area under consideration. Also, the western boundary of the proposed study area is adjacent to Euston station; it presents limitations given that Euston is proposed as one of comparator stations, as described later on in this Chapter. Despite these, the study area is considered to be reasonable to capture the impacts of station redevelopment and wider regeneration because it matches what was defined as an impact area in the previous study referenced above.

³ King's Cross: Shaping the Future, Camden and Islington Councils (2012)



Figure 2.1: Study boundary area



Source: Steer

Case study evidence plan

- 2.20 Our study has drawn on three sources of evidence:
 - documentation review, including any evidence of the rationale driving the proposed changes and any of its anticipated impacts;
 - stakeholder interviews, targeted at stakeholders who were involved in the development stage of the scheme and who can provide insight into the decision-making process; and
 - data analysis that can provide a quantified measure of the impacts observed in the study area across a number of metrics and indicators.

Documentation review

- 2.21 Documentation of existing research in the form of reports, papers and articles has been undertaken, including the report on Value of Station Investment⁴. This provides evidence which, together with stakeholder interviews and data analysis, allows us to postulate which causal linkages underpin the Theory of Change. Findings from this documentation review are presented in Chapter 3 of the report.
- 2.22 The documentation review includes:
 - documents and reports produced by governmental and local organisations, including the Department for Transport, Network Rail, Transport for London, the Greater London

⁴ The Value of Station Investment, Network Rail (developed by Steer) (2011)



- Authority, the Ministry of Housing, Communities and Local Government or the Council of Camden and Islington;
- reports produced by consultants or others (e.g. Regeneris) that draw on wider evidence available;
- academic reports, such as from the University College London or the Urban Land Institute;
 and
- a limited number of media articles, mostly to illustrate the change of perception in the area.
 Where these are used, it is acknowledged that these may not have the rigour of the other sources above but are useful in providing insight into the perception of the area.

Stakeholder interviews

- 2.23 Stakeholders involved at the scheme development stage have been interviewed, to draw on their understanding of the decision-making process and to capture their insights. Interviews include:
 - Robert Thornton, former Principal Architect at Network Rail involved in King's Cross redevelopment;
 - Ian Lindsey, former Land and Property Director at Crossrail and Head of Major Developments at Network Rail with direct experience of a former Euston masterplan development;
 - Mike Goggin, former Director of Stations & Customer Service at Network Rail;
 - Stephen Burke, senior officer at Camden Borough; and
 - Kevin McGeever, former Senior Programme Manager for the King's Cross station rebuilding.
- 2.24 Views from stakeholders are subjective in nature but provide useful contextual information to inform the rationale for change that drove the programme of redevelopment. To capture the potential level of subjectivity, stakeholder evidence is presented in a different format so that it can be easily identifiable.
- 2.25 The stakeholder interviews that took place did not follow a pre-determined structure, but a list of key common themes was explored across all interviews to seek to gain insight and included the following topics:
 - What were the key drivers for change? Which of these drivers prompted change first and which ones were a consequence of the others?
 - What was the rationale for the interventions being planned and executed the way they have? Was it a structured, planned process or did it evolve organically?
 - What was the role of the different stakeholders in the planning and development process?
 - What drove the decisions of companies like Google or Facebook and of organisations such as the University of Arts to locate in the area? What was the impact of such decision?
 - Could King's Cross and St Pancras stations have been developed in a more functional way
 with less focus on architecture innovation? Would they have differed from their current
 form and impact if that had been the case?

Data analysis

2.26 Quantitative evidence from data analysis is also used to test the hypotheses laid out in the logic map that underpins the Theory of Change. Table 2.1 and Table 2.2 below show how proposed evidence has been used to test the hypotheses about station impacts and wider area impacts respectively.



Table 2.1: Evidence used to inform station impacts

Category of impact	Metric/measure	Hypothesis to test	Data sources
Station usage/demand	Station footfall LU passengers	Significant demand growth, higher than average	ORR (Rail) Transport for London (London Underground Line)
Non-rail users and visitors to stations	Attractiveness of station retail	Station offer attracts non rail users	Statistics about proportion of non-rail users at St Pancras

Table 2.2: Evidence used to inform wider area impacts

Category of impact	Metric/measure	Hypothesis to test	Data sources
Commercial property, jobs, GVA	Area/floorspace by land use	Significant increase in commercial floorspace Transformation in land use mix from previous uses to current	OA Reporting Land Registry Data Valuation Office Agency CoStar
	Value and price of commercial development	Overall increase in value of commercial property in area Increase in value per square metre, higher than average	OA Reporting Land Registry Data Valuation Office Agency Regeneris Report CoStar EGi Radius Real Capital Analytics Investment Property Database
	Total jobs	Increase in the number of jobs	OA Reporting ONS/Nomis Regeneris Report
	Jobs by type and sector	Higher value jobs in the area	OA Reporting ONS/Nomis
	GVA per job	Higher GVA per worker	ONS/Nomis
	Number of dwellings and units	OA resulted in significant housing delivery	OA Reporting / Camden / GLA Adjacent MSOAs EGi Radius
Housing delivery	Value of dwellings	House/property price increase driven by increased attractiveness in OA	House and rental prices REalyse GLA
	Affordable / social housing	Higher proportion of affordable / social housing delivered	OA Reporting / Camden / GLA
Attractiveness of place as a	Area as entertainment destination	Transformation of King's Cross area as destination venue (e.g. restaurants, bars, shops, cultural offer)	Documentation review and stakeholder interviews
destination	Spill over effects	Evidence that better offer in King's Cross area results in enhanced visitor offer in surrounding area	Documentation review and stakeholder interviews

2.27 Data has been collected and analysed for the King's Cross St Pancras area, as well as for other comparator areas, to understand the relative evolution of King's Cross St Pancras against other



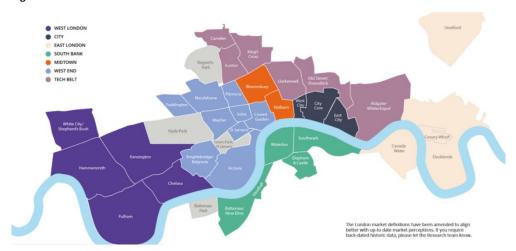
major London termini that have also undergone station redevelopment works and wider area regeneration. The rationale for the choice of comparator areas is described in the following section of this Chapter.

Selecting comparator areas

- 2.28 The unlocking of King's Cross for development and regeneration via investment in the rail network created an unprecedented scale of opportunity to deliver new homes, commercial space and jobs in Central London. Understanding the scale of that impact in and of itself is important. However, to understand whether it created additional impacts beyond what would have happened in the market anyway, it is critical to compare the performance of King's Cross St Pancras with a wider set of relevant benchmarks.
- 2.29 The starting point for establishing relevant benchmarks for the analysis is to identify the characteristics of King's Cross St Pancras and consider how these then are reflected in other locations. For the purpose of this exercise, we considered the fundamental attributes from a market influence perspective to be:
 - Major rail service improvements Eurostar, High Speed 1 (HS1), Thameslink
 - Station/interchange improvements
 - Land capacity and availability
 - Integrated public realm
 - Location of key organisations in the area existing (Knowledge Quarter) and new (Central Saint Martins)
 - Land ownership/control (which could influence whether redevelopment of the land is easy or not from a process perspective).
- 2.30 The next step was to consider the 'type' of benchmark required to isolate the specific 'King's Cross St Pancras' effect from wider market factors, this created two subcategories of space:
 - General market benchmarks those used as standard market comparators as follows:
 - Commercial Market Central Activities Zone (CAZ)/Central London, the 'Tech Belt' (see later)
 - Residential Market Camden Borough, Central London
 - Specific locations (all markets) Victoria, London Bridge, Liverpool Street, Euston, Paddington, Old Street & Shoreditch
- 2.31 In terms of the office market, we have drawn on the areas used within Avison Young's Central London Office Analysis report. These are not specific statistical boundaries but do represent commonly understood sub-markets within London within the property industry. These are based on broad area characteristics and drivers, with a number focused on areas driven by rail stations.
- 2.32 The advantage of using these geographic definitions is that they reflect commonly understood and recognised areas in the property industry, allowing results to be reflective of the market and replicable over time. The market areas are shown in the plan below:



Figure 2.2: Central London office markets



2.33 The map shows the individual sub-markets used, the wider Tech Belt comparator area and the broad definition of Central London used within the analysis. The following table summarises the pros and cons of each of the potential market comparators.



Table 2.3: Evidence used to inform wider area impact

Location	Observations	Advantages (as market comparator)	Disadvantages (as market comparator)
Central London	King's Cross St Pancras forms part of the CAZ and therefore its relative performance helps identify how rail investment (and proximity to it) has enhanced performance.	 Captures same housing and commercial market dynamics, occupiers and residents (which provides a baseline evolution of these markets, against which to compare the performance of King's Cross over and above this) Takes into account the general accessibility of Central London Standard performance Benchmark for commercial performance 	Limited relevance for residential given focus on 'super prime' offer
Tech Belt	The 'tech belt' brings together a number of sub-markets that occupy the fringe of Central London.	 Similar sectoral and occupier mix Have transitioned from relatively immature locations for commercial activity to core markets Investment and development happened over similar timeframe to King's Cross St Pancras (which provides a baseline evolution of these markets, against which to compare the performance of King's Cross over and above this) Mix of major sites and infill development Residential development would reflect the character and nature within King's Cross St Pancras 	Not all parts have been subject to development and/or regeneration so may impact data
Camden Borough	In residential terms, understanding the impact of values close to the station compared to the wider borough can help show how King's Cross St Pancras's position has changed	 Standard comparator area for residential values Allows for extraordinary impact (linked to proximity) to be considered as general accessibility factored into borough wide impacts 	 Needs to be used with caution as typologies of developments and commercial space might differ between the Borough and the in-scope area Use of value per sqft somewhat balances that impact
Victoria	Victoria offers an opportunity to compare to an area that has seen development and change, but without changes to	 Availability of opportunity for redevelopment in hinterland – although more complex than King's Cross St Pancras 	 More established market at the outset Fading institutional driver (public sector/government)



Location	Observations	Advantages (as market comparator)	Disadvantages (as market comparator)
	the rail offer. It has also seen changes to 'react' to King's Cross St Pancras growth.	 No major change to rail station / service Majority of opportunity sites under single control – LandSec Would allow for understanding of how the market directs change Interesting comparison as King's Cross St Pancras now a stronger performing market – Victoria seeking to re-establish itself Definitive focus and area of commercial activity Residential come forward in hinterland – south of main entrance – similar dynamic to King's Cross St Pancras 	
London Bridge	London Bridge offers the opportunity to test changes pre- and post-rail investment and understand how impact may be affected by limitations on land supply.	 Understanding of rail impact through sequenced investment in service and station Early waves of development (e.g. More London) pre-dated station investment and service changes Current waves more influenced by it Mix of existing and new stock – understanding of any market premium 	 Residential development has been limited Traditionally always been a Central London market Higher starting values Limited land availability at scale Transformational scale of station investment at London Bridge makes it a difficult comparator against King's Cross (as both transformation programmes are different)
Liverpool Street	Liverpool St was London's first major rail enabled development but has seem limited rail change until Crossrail investment. Can help understand, for instance, how 'place investment' impacts values.	 Established area market-wise, but now being repositioned/ redeveloped Major single land control – British Land 	 No rail intervention / investment – but anticipation of Crossrail Very different/established economic base that drives demand



Location	Observations	Advantages (as market comparator)	Disadvantages (as market comparator)
Euston	Euston lies in the same edge of centre market and benefits from the same knowledge ecosystem – but lacks rail/place investment and development land. Comparing to Euston offers a 'market control' view.	 Comparator which shows what happens when there is no rail upgrade in the same commercial market Similar contextual factors given location Market-led growth only Presence of institutions Poorer station experience, but good service 	 Limited development land Therefore, a wide area with other drivers so hard to understand rail influence Proximity to King's Cross St Pancras means that changes in some of the key indicators around Euston are affected by investment around King's Cross St Pancras, making the comparison difficult
Paddington	Development happened prior to any rail improvement and allows comparison to the land availability factor at King's Cross St Pancras as driver of change. More recently change focused on arrival of Crossrail.	 Major development in close proximity Former industrial land under single ownership Edge of Central London market position Unproven prior to coordinated regeneration at Basin Secondary impact now felt on adjacent sites. 	 Little/no investment in rail service improvements Electrification has enhanced some services – precursor to Crossrail Some improvements to Station experience and offer



Location	Observations	Advantages (as market comparator)	Disadvantages (as market comparator)
Old Street & Shoreditch	A comparison for the economic activity that drives King's Cross St Pancras and how, without rail, the area may have been impacted as businesses sought 'fringe' locations.	 Similar economic mix and timing of growth and change However, no investment in rail infrastructure and modest service change Similar context in terms of historic perception and activity 	 More established creative presence which gave a brand No major land control and development more fine-grained – less sense of place



- 2.34 Based on the analysis summarised above, it was decided to consider performance against three sub-markets Paddington, Euston and Old Street/Shoreditch alongside the standard wider area benchmarks of the Tech Belt, Borough and Central London. For each of the comparator stations, a similar number of MSOAs (to the King's Cross St Pancras study area) were selected to enable a comparison between them.
- As described in the table above, it is important to acknowledge the proximity of Euston to the King's Cross St Pancras study area. Changes in the metrics analysed around Euston station might have been caused not because of improvements at or around Euston but rather due to the King's Cross and St Pancras stations' redevelopment and wider area regeneration programme. Therefore, using Euston as a comparator brings potential limitations and comparisons, as those presented in this report, should be considered with caution.
- 2.36 For each area market data was collated initially from CoStar and reviewed for its coverage and sample size, additional sources were then used (as shown in Table 2.1) to ensure a robust base of information was in place upon which reliable conclusions can be drawn. Critically all datasets have national coverage and have been collated on a consistent basis over time. As such, this analysis can be replicated over time and across different geographies.

Development methodology

- 2.37 In assessing the impacts of investment at King's Cross St Pancras on development activity, we have analysed data covering areas across several spatial scales. Firstly, we have considered the impact upon the aforementioned areas: Inner Boroughs, Tech Belt, CAZ and London Borough of Camden.
- 2.38 Secondly, to provide a direct comparison with number of permissions and quantum of floorspace, we have analysed development impacts within a 500m radius of King's Cross St Pancras. This has been compared against other key London transport nodes including Euston, Old Street and Paddington.
- 2.39 The selection of 500m radius (approximately a 6- to 8-minute walk) is generally accepted as an appropriate area of influence, reflecting distance between station areas and places of work that people are prepared to walk⁵. Moreover, given the close proximity of many of London's stations, limiting analysis to 500m zones of influence limits the ability of neighbouring stations to influence data outputs. This is only an assumption adopted for presentational purposes, which does not imply that impacts do not extend beyond a 6- to 8-minute walk from the station, but does give an approximation of the development impact across comparator stations.
- 2.40 To analyse number of consents, quantum of residential units/commercial floorspace consented and the balance between uses, we utilised the London Development Database. The database is a collaborative project between the Mayor of London and London boroughs to monitor planning permissions, starts and completions across London. It has been running since 2004.
- 2.41 Data collected includes:
 - Any new build residential units;

⁵ https://www.mendip.gov.uk/media/26802/AP4-1B-Tetlow-King-for-Waddeton-Park-How-far-do-people-walk/pdf/AP4-1B - Tetlow_King_for_Waddeton_Park - How_far_do_people_walk.pdf?m=637429619250730000



- Any loss or gain of residential units through change of use or conversion of existing dwellings;
- Creation of seven or more new bedrooms for use as either a hotel, a hostel, student housing or for residential care through new build or change of use;
- 1,000 sqm or more of floor space changing from one use class to another or created through new build or extension for any other use; and
- The loss or gain or change of use of open space.
- 2.42 This bank of information provided the most comprehensive dataset of planning activity in the relevant areas over a c. 20-year time horizon. Gathering data on development activity in the period before, during and after the outline consent for King's Cross Central Masterplan was an important means of contextualising the impact of investment at King's Cross.



3 Redevelopment context of the King's Cross St Pancras area

- 3.1 The investment in the King's Cross St Pancras area was circumscribed around general momentum in London to redevelop areas that had potential to attract investment. Thus, several Opportunity Areas (OAs) were identified in the London Plan 2004 to deliver this, one of which was King's Cross. We consider the implications of this, as well as other local and wider area level contextual factors, that led or contributed to the transformational impacts that can be observed today.
- 3.2 In addition, three different strategic drivers that led to investments in the area and at the stations (the need to increase rail capacity; stations becoming a gateway to the city; and regeneration) are explored. The evolution of perceptions of the area over time, captured through stakeholder interviews, is also presented in this Chapter and helps to illustrate the context in which change has taken place over time.

The King's Cross St Pancras area

- 3.3 The stations and their surrounding area are located within both London Boroughs of Camden and Islington, in the centre of London. At present, there is an abundance of transport connections, both domestic and international, which makes the area a popular transport interchange. These comprise of six London Underground (LU) lines linked at King's Cross station, domestic main line rail services (HS1 domestic services, Thameslink services, East Midlands services, and services on the East Coast Main Line), and a terminus for international high-speed services to Paris, Brussels, and Lille. In addition to this, 17 bus routes serve the area.⁶
- 3.4 Several types of businesses sectors, such as retail, hospitality, and creative industries, reside in the area. The area also serves as a growing tech hub and life sciences hub.
- 3.5 The map below in Figure 3.1 indicates the key buildings in the area that have been developed over the last two decades.

⁶ Railway Reform: Toolkit for Improving Rail Sector Performance Case Study: London King's Cross, The World Bank



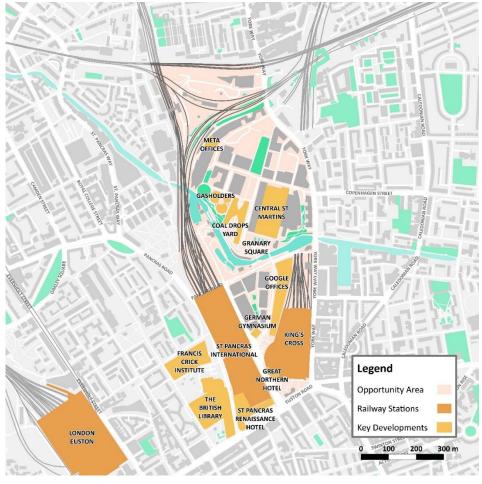


Figure 3.1: Map of the King's Cross St Pancras area

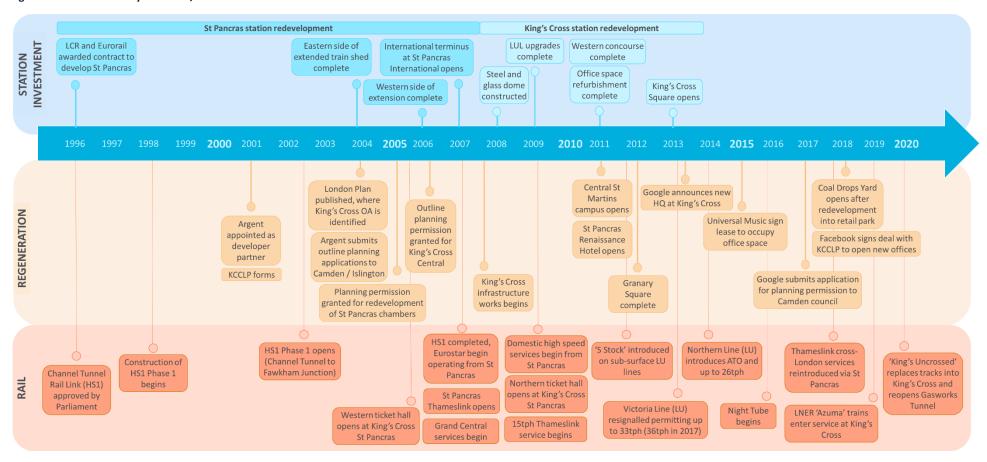
Timeline of key decisions

- 3.6 The King's Cross St Pancras area has undergone substantial change over the last 20 years. The area has always been well connected, having been known as a significant industrial transport centre in Victorian times.⁷ However, in the years leading up to its redevelopment, the area was hindered by the condition of the station and surrounding public realm.
- 3.7 The context in which the redevelopment of King's Cross and St Pancras stations took place was complex and multifaceted, with multiple decisions from different landowners and stakeholders interacting with each other and creating a catalytic effect in the regeneration of the wider area.
- 3.8 The key decision points and events over the last 20+ years that have shaped the study area are illustrated in the timeline in Figure 3.2 below. These decisions are classified into three categories:
 - Station investment decisions and milestones;
 - Wider area regeneration decisions and milestone; and
 - Rail enhancements and investment decisions and milestones.

⁷ Railway Reform: Toolkit for Improving Rail Sector Performance Case Study: London King's Cross, The **World Bank**



Figure 3.2: Timeline of key decisions/milestones



Source: Steer



From our discussions with stakeholders⁸, development was organic, without an initially fixed masterplan. The process was an evolving vision, adaptable to market conditions, and this was reflected in the staggered series of events and the regeneration taking place over a long time period. Spatial planning in the area adapted to the evolving trends at the time. This made it attractive to several businesses and contributed to the current vibrancy of the area.

- 3.9 The developers of the King's Cross site, Argent, took the approach of allowing room for flexibility in their masterplan, being aware of the dynamic market environment where the stations are located⁹.
- 3.10 Development of the project required engagement and consultation with a range of stakeholders. For instance, Argent, as development partner, engaged with local communities, highlighted in a report by Regeneris Consulting, and the process overall involved four rounds of public consultation¹⁰.

Rationale for intervention

- 3.11 Understanding the rationale for deciding to redevelop the King's Cross and St Pancras stations in the broader context of the multiple other interventions, investments, and retail sector changes that took place in the area is key to developing a theory of change which hypothesises the expected impacts resulting from the investment.
- 3.12 The rationale for intervention is explored from three contextual drivers: rail drivers, the demand for wider regeneration, and station as a gateway.

Rail investment

Rail enhancements were the primary initiator of change in the King's Cross St Pancras area, according to stakeholders interviewed.

- 3.13 Background demand growth, as well as new demand enabled by better connectivity and accessibility and new housing unlocked by better rail links, led to the need to invest in King's Cross and St Pancras stations so that they had sufficient capacity to accommodate future demand. For example, in 2007, there were 7,700 peak hour passengers at King's Cross, with projected three-hour peak demand growth by 2014 at 16%.¹¹
- 3.14 There are four key areas where decisions were made regarding rail and LU services which involved enhanced or new services.
 - International and domestic high-speed services to St Pancras;

¹¹ Delivering a Sustainable Railway, Department for Transport (July 2007)



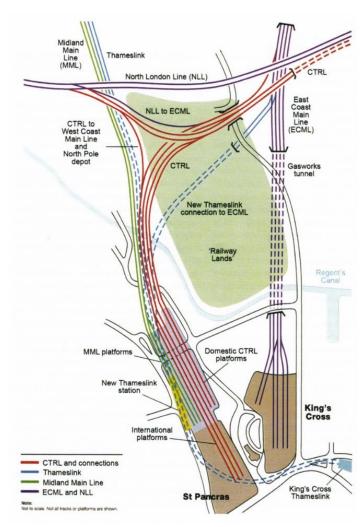
⁸ Stakeholder quotes and insights are presented in this format to highlight that they are subjective in nature.

⁹ The Economic and Social Story of King's Cross, Regeneris Consulting (November 2017)

¹⁰ Railway Reform: Toolkit for Improving Rail Sector Performance Case Study: London King's Cross, The World Bank

- Thameslink & King's Cross St Pancras Underground station;
- King's Cross mainline station redevelopment; and
- Rail developments post-HS1.
- 3.15 Figure 3.3 below illustrates the rail infrastructure serving King's Cross and St Pancras stations:

Figure 3.3: King's Cross lands and rail works



Source: 'St Pancras Station', Jack Simmons with additional chapter by Robert Thorne

International and domestic high-speed services to St Pancras

- 3.16 HS1 (previously the Channel Tunnel Rail Link, or CTRL) is a high-speed line which connects the Channel Tunnel with London, via Stratford, Ebbsfleet and Ashford in Kent. Eurostar services began serving St Pancras on opening¹², while domestic high-speed services between St Pancras and Kent were introduced in December 2009.
- 3.17 HS1 was initially planned to tunnel through south-east London to an underground King's Cross international station. However, in 1994 this plan was rejected, and the decision was taken to

¹² Prior to opening of the high-speed line Eurostar services operated from Waterloo International.



approach London from the east, terminating at St Pancras. The rationale for this decision is described in **Appendix B**.

- 3.18 As a result of the decision to locate HS1 at St Pancras, the station was extended to hold extra platforms and extend existing platforms to the required length for Eurostar. On completion there were 13 platforms: 4 for Midland Main Line services on the western side, 6 for international services in the central train shed, and 3 for HS1 domestic services to Kent on the eastern side¹³. On opening, HS1 could carry up to 8 Eurostar services per hour as well as up to 8 domestic high-speed services per hour, along with two open access paths¹⁴.
- 3.19 Once St Pancras opened to international services in 2007, Eurostar moved their operations to St Pancras and stopped serving Waterloo. Domestic HS1 services launched in 2009 using new Class 395 'Javelin' trains, as part of a major revision of the Southeastern timetable in December 2009.

Thameslink & King's Cross St Pancras Underground station

- 3.20 As a result of the work to bring HS1 to St Pancras and the increased services this would bring to the area, the King's Cross Thameslink station and King's Cross St Pancras underground station needed to be expanded to handle the additional passenger traffic.
- 3.21 The decision to relocate the King's Cross Thameslink station to St Pancras was originally intended to accommodate the Thameslink Programme, which would introduce additional and longer trains connecting North and South London through the Snow Hill tunnel.
- 3.22 When the new Thameslink station was constructed, it was driven by three purposes: to accommodate the expanded Thameslink network, to improve safety and passenger experience at the station, and to serve the new Eurostar/HS1 terminal at St Pancras. Thameslink station opened in December 2007, separately from and in advance of the wider Thameslink Programme.
- 3.23 Regarding the Underground station, a key recommendation of the Fennell report following the 1987 King's Cross Fire¹⁶ was taking action to improve passenger flow, ease congestion and improve safety at the King's Cross St Pancras Underground station. In response, the London Underground (King's Cross) Act was passed in 1993. Two new ticket halls were constructed: the western ticket hall and northern ticket hall.
- 3.24 The western ticket hall was opened in 2006, doubling the station capacity at the time to serve HS1, Thameslink and visitors to the 2012 Olympics. The northern ticket hall opened in 2009, further doubling station capacity and reducing congestion. It also allowed step-free access to the Underground platforms and was described as essential to effectively managing future

¹⁶ Investigation into the King's Cross Underground Fire, DfT (October 1988)



¹³ King's Cross & St Pancras Upgrade, alwaystouchout.com (2007)

¹⁴ <u>Channel Tunnel Rail Link Case Study, Project Profile, UCL OMEGA Centre for Mega Projects in Transport and Development (August 2008)</u>

¹⁵ Thameslink 2000, RailStaff (2006)

passenger numbers.¹⁷ This ticket hall also connects directly to the HS1 domestic station via a direct subway link.¹⁸

- 3.25 Overall, we have identified the following key drivers behind the decisions to redevelop the Thameslink and Underground stations:
 - Improve passenger safety and experience by expanding capacity, particularly as a response to the 1987 fire;
 - Better serve and accommodate additional passengers due to HS1/Eurostar;
 - In the case of Thameslink, accommodate the longer and more frequent services to be introduced by the Thameslink Programme; and
 - After the Olympics were won in 2005, improve capacity to accommodate visitors to the 2012 Olympics.

King's Cross mainline station redevelopment (2008-2012)

- 3.26 As the improvements at King's Cross St Pancras underground station were nearing completion, work began on the King's Cross Redevelopment Programme in 2008. This project focused on constructing a new concourse at King's Cross, four times the size of the previous concourse (expanded from 2000m³ to 8000m³), in order to accommodate more passengers and improve the public realm at the station.
- 3.27 Improvements included constructing a dome over the top of the subsurface LU ticket halls, reconstructing platforms 1 and 8, shortening platforms 5-8 to enlarge the concourse, a new footbridge and escalators, a new 12-car platform 0, new office space, a renewed train shed roof and solar panels. The new concourse uses the northern LU ticket hall as its support structure meaning that the improvements to the Underground station were a prerequisite to building the concourse.
- 3.28 The project took place from 2008-2012, opening in time for the London Olympics. Planning for the redevelopment was already underway when London won the Olympics in 2005. After this, the original timescales for the redevelopment were redrawn to ensure the new concourse would be ready in time for the Olympics in 2012. The final phase of the redevelopment, which took place in 2013, saw the existing 70s green canopy to the front of the station removed to create a new public square.²¹

Rail developments post-HS1

- 3.29 The main rail development affecting the King's Cross St Pancras area is the East Coast Upgrade, which began in 2019 and is currently ongoing.
- The main aim of 'King's Uncrossed' (that took place in December 2020 see details in Appendix
 B) was to modernise track, signalling and overhead equipment, improving reliability by making it easier for trains to arrive and leave. The work was completed in June 2021 and could enable

²¹ King's Cross Redevelopment, Network Rail (2012)



¹⁷ King's Cross St. Pancras Tube station doubles in size as state-of-the-art ticket hall opens, TfL (2009)

¹⁸ King's Cross & St Pancras Upgrade, alwaystouchout.com (2007)

¹⁹ King's Cross Station Redevelopment Programme, Network Rail Consulting

²⁰ Construction of the King's Cross northern ticket hall, London, UK, Jim Worthington and Kenneth Awinda (2013)

more extra services to run into King's Cross overall, though the timetable has remained the same so far.²²

Upgrades to the Midland Main Line into St Pancras were first proposed in 2012 as part of the High Level Output Specification for Control Period 5, to include electrification of the line between London and Sheffield.²³ However, the project was paused in 2015 along with the rest of the HLOS plans in order to carry out a review. Work was restarted later in 2015, then cancelled again in 2017, and were finally re-announced in 2021 as part of the Integrated Rail Plan.²⁴

Rail and Tube service changes since 2000

3.31 Alongside the changes described above, there have been various changes to the rail and Tube services which call at King's Cross and St Pancras over the past two decades. These changes have been summarised in Table C.1 (in **Appendix C**), which covers National Rail services at the two mainline stations, and Table C.2 (in **Appendix C**) which covers Underground services at King's Cross St Pancras.

Wider area regeneration

- 3.32 There was ample land available in a prime location that was greatly accessible by transport. Therefore, the desire to make better use of this land and to regenerate it was another strategic driver.
- 3.33 The context in which the station investments were decided, at a local level and a wider are level, are described below.

Local context

- 3.34 At a local level, the King's Cross St Pancras area was in significant need of regeneration, due to problems of the built environment (i.e. poorer urban realm) and challenges associated with deprivation levels. Borough data on Indices of Multiple Deprivation (IMD)²⁵ shows that in 2004, 75% of Islington and 48% of Camden's population were living in the most deprived Lower Layer Super Output Areas (LSOAs) in the country. When compared with the other 354 Local Authority districts in England at the time, Islington ranked 3rd and Camden 21st place.
- 3.35 The potential opportunities that redeveloping the area would bring were recognised by both Islington and Camden Councils who published the King's Cross Opportunity Area Planning and Development Brief. This document outlined the objectives for the development, that if met, would allow the potential of the site to be successfully realised:
 - A development of both international and local significance;
 - Mix of housing, retail, cultural and leisure, office and open space;
 - Design incorporates safe public spaces that contribute to a positive image of King's Cross;
 - Respect for heritage, adapting the existing buildings into a modern development;
 - Regent's Canal as a safe and pleasant passageway through the site;
 - An accessible and permeable site; and,

²⁵ Indices of Multiple Deprivation, Borough, Ministry of Housing, Communities & Local Government



²² Network Rail, 2022: King's Cross Remodelling

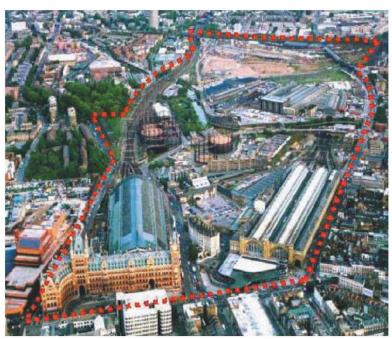
²³ High level output specification 2012: Railways Act 2005 statement, DfT (2012)

²⁴ Integrated Rail Plan for the North and Midlands, DfT (2021)

A sustainable development.²⁶

3.36 Islington Council also published a Neighbourhood Framework Document in July 2005. This consisted of nine Neighbourhood Action Plans for the communities of the King's Cross Regeneration Area that fall within Islington. The Plans aimed to support achieving regeneration goals of the Islington Local Strategic Partnership, and the Council's vision²⁷.

Figure 3.4: King's Cross Opportunity Area identified in the 2004 London Plan



Source: The London Plan, 2004

London context

- 3.37 At a more macro level, London-wide, the ambitions for spatial development were high in 2004. With population projected to reach 8.1 million by 2016 (11% growth from 2004), and net jobs growth of 636,000 by 2016²⁸, the focus was on accommodating this around the rail termini. Planning guidance from 1996 emphasised the need for highly dense and commercial land use surrounding the termini.²⁹
- 3.38 The London Plan 2004 set out a clear spatial planning policy that focused on the growth of OAs. It also outlined the phasing and co-ordination of development, including an expansion of the CAZ, that was constrained by historic building and planning constraints, towards 'inner' OAs that tended to be around major termini stations.
- 3.39 There was also focus on regenerating the urban areas of East London. Many of the OAs are in East London, a part of the capital that was becoming home to significant developments such as

²⁹ ULI Case Studies, King's Cross, Urban Land Institute (July 2014)



²⁶ King's Cross Opportunity Area Planning and Development Brief, Camden and Islington Councils (January 2004)

²⁷ Regenerating King's Cross Neighbourhood Framework Document, Islington Council (July 2005)

²⁸ The London Plan, Mayor of London (February 2004)

the Olympic stadium. The decision to have St Pancras as the terminus for the CTRL, as discussed earlier, was heavily driven by the ambition to regenerate East London.

- 3.40 Demand for rail had increased substantially over the period and it was forecast to increase significantly in the future. Many other termini stations, including Manchester Piccadilly and Birmingham New Street, underwent major investment programmes alongside service enhancements over the past couple of decades. Failure to accommodate this rise in demand would potentially have constrained economic growth.
- 3.41 The macro-economic context of service-sector and knowledge economy led growth, much of which was focused on city centres, underpinned the significant growth in rail demand witnessed over an extended period from the mid-90s onwards. Employment in London increased from under 4 million in 1996 to over 5.5 million by 2014³⁰ an increase of 38% over the period, with much growth focused on Central London, the City and Canary Wharf. Demand for rail was driven by a significant increase in London's population (much of the increase from inward migration), alongside increased commuting from the Home Counties.
- 3.42 The recession of 2008 was severe in terms of economic growth, although it did not affect the trends that were identified above. London's post-recession recovery was the strongest compared to all other UK regions and nations.³¹
- 3.43 The London Plan 2004 stated that London's future growth depended on overcoming interrelated constraints around employment land availability (with Central London constrained), housing supply and lack of affordable housing, and public transport capacity.
- As such, the London Plan (2004, and subsequent Plans) developed spatial priorities for accommodating growth in 'Opportunity Areas' and 'Areas of Intensification'. OAs represented large tracts of former industrial / brownfield land with the potential for large-scale redevelopment and regeneration. Areas of Intensification represented established locations with a high level of public transport accessibility which could support higher density development several of these were around termini stations including Victoria and Euston.
- These policies combined to inform the proposed development and expansion of London's CAZ. The CAZ policy recognised the unique appeal and attractiveness of Central London to internationally competitive businesses in knowledge economy sectors, and that the expansion of the CAZ was necessary to support the growth of these sectors.

³¹ London's changing economy since 2008, Greater London Authority (October 2015)



³⁰ <u>Updated employment projections for London by sector and trend-based projections by borough, Greater London Authority (July 2015)</u>

Central Activities Zone

CAZ frontages
International retail centre

Opportunity Areas

Areas for Intensification

West End Special Retail
Policy Area

Mixed uses with a strong

state character

legal character

health character

Figure 3.5: Central Activities Zone

Source: The London Plan 2016 (with King's Cross Opportunity Area shown within red rectangle)

3.46 King's Cross had locational advantages that related directly to the policies above. As a major rail terminal, the area was a natural focus of 'intensification', while the railway lands offered a unique opportunity to redevelop a large brownfield area that could directly form part of an expanded CAZ.

Area regeneration

Authority 100032216 (2013)

- 3.47 Redevelopment of the site has been a project that has spanned a 35-year period and on completion is expected to cost a total of £3 billion³². Since the mid-80s, the under-utilised railway lands that lay behind both stations presented an opportunity for development which would make use of the high levels of connectivity of the area by locating businesses and residents in a premium, central London location. At the time, British Rail had intentions of transforming the site into something that was far from its redundant state, so they set up a public competition to select a development partner to redevelop the 135 acres of railway lands.³³
- 3.48 The London Regeneration Consortium (LRC) were appointed in 1988 as developers. LRC's masterplan and proposed station concourse underwent consultation and iterations of design development. In the May 1988 masterplan, the land area allocated to offices was 6 million sq ft, to retail was 250,000 sq ft, and the number of housing units were 1,400³⁴. It could be said

³⁴ London Regeneration Consortium plc 'King's Cross Proposals for redevelopment'



arts, cultural or entertainment character academic character

Royal Parks, Palaces and environs Borough Boundaries

³² ULI Case Studies, King's Cross, Urban Land Institute (July 2014)

³³ 'St Pancras International' Alastair Lansley, Stuart Durant, Alan Dyke, Bernard Gambrill, Roderick Shelton, Laurence King ISBN 13: 978 1 85669 552 7

that these proposals had more of a commercial focus on the land use. However, after submitting a planning application to the London Borough of Camden, their proposals were scrapped due to the economic climate and collapse of the property market.





Source: The Guardian 'King's Cross then and now - in pictures'

- 3.49 With aspirations for development still prevailing, in 2001 the King's Cross Central Limited Partnership (Argent, London & Continental Railways, and DHL Supply Chain) formed, and they began working on redevelopment plans.
- 3.50 The potential for King's Cross as an area to harness for future growth was recognised in the London Plan 2004. The Plan estimated that within the 53 ha area, 11,400 new jobs and 1,250 new homes would be created. This potential was realised in 2006 when Argent, the developers, had their planning permission granted for a mixed-use site that allowed for approximately 50 new buildings, 20 new streets, 10 new public spaces, restoration and refurbishment of 20 historic buildings and structures, up to 2,000 homes and 650 student accommodation facilities.³⁵
- 3.51 Compared to the LRC proposals of 1988, the land usage in Argent's proposals placed more emphasis on housing, which was an important factor in determining whether the development would be granted permission. The Mayor's strategy at the time stressed the need to support the local community by providing homes, especially affordable homes, with transportation connections.

³⁵ About the redevelopment of the King's Cross area of London (kingscross.co.uk)



Figure 3.7: Argent masterplan, 2007



Source: 'Transforming King's Cross' Merrell

- 3.52 It is also important to acknowledge the influence of the heritage aspects of the King's Cross site on its place of planning, especially the public realm and design. For instance, the Great Northern Hotel is a distinctive building on the site, having been restored with several original features retained. Several historical buildings on the site are listed, and many have heritage value which contribute to its unique character. English Heritage played a role in communicating their importance in 1988, when they were under threat from unfavourable development proposals.
- 3.53 Central Saint Martins, University of the Arts London campus, relocated to the Granary Building in 2011, costing £100 million for construction³⁶.

Stakeholders interviewed note that the purpose of relocation, from the LRC/Argent perspective, was not primarily for commercial profit, but to attract an institution that would provide a sense of vibrancy to the area.

3.54 Google has invested £650 million in headquarters at King's Cross Central. Other notable tenants in the area are Universal Music and Facebook, soon to be joined by Nike and Sony.

As stakeholders interviewed have described, the decision for these companies to locate at King's Cross was likely heavily influenced by the location of an international rail hub at St Pancras.

³⁶ <u>ULI Case Studies, King's Cross, Urban Land Institute (July 2014)</u>



- Other notable points of interest within the study area are the British Library, which relocated on a former rail goods yard in 1997, and the Francis Crick Institute, which opened in 2016. Both are part of the Knowledge Quarter, a consortium of organisations around King's Cross, aimed at facilitating collaboration and knowledge sharing between members.
- 3.56 Together, University of the Arts and the Knowledge Quarter form the foundation of the cultural offer at King's Cross St Pancras.
- 3.57 There is a growing life sciences cluster in the area. Planning permission has recently been approved by the London Borough of Camden for a US pharmaceutical research headquarters opposite King's Cross station and Astra Zeneca have relocated their headquarters to King's Cross Central.

St Pancras Station Investment

- 3.58 St Pancras station gained prominence when it was selected to become the terminus for London international rail services in 1994. Prior to this, the Channel Tunnel Rail Link (CTRL) was planned to initially enter the King's Cross site from the Southeast of London. London Continental Railways was awarded the contract in 1996 to redevelop St Pancras station. Rail Link Engineering was created to progress the reconstruction, and just over a decade later, Eurostar services began operating in 2007.
- 3.59 The redevelopment of St Pancras, costing a total of £800 million, involved extending the station to accommodate the new Eurostar trains and provide capacity for existing domestic services and new high-speed services.
- 3.60 Access to the Eurostar platforms was created from below, with light wells punched through the platform decks to allow light into the concourse beneath³⁷. The eastern side of the train shed extension was completed in 2004, followed by the western side in 2006³⁸. As part of the latter works, a new Thameslink station (as detailed earlier in this chapter) was fitted out and opened below St Pancras in 2007.
- 3.61 The works accommodated a very significant increase in demand for rail travel, as can be seen in Chapter 5 (see Figure 5.1).
- 3.62 In 2019, one in six of the station visitors were non-rail users³⁹, which could be attributed to the high-quality retail offering that was developed at the station, transforming it into a destination in its own right.

King's Cross Station Investment

3.63 King's Cross station's redevelopment took place to provide capacity that would meet forecast peak hour passenger demand, and a more attractive passenger retail and transport interchange⁴⁰. The £550 million works were part of a broader major stations redevelopment strategy by Railtrack. John McAslan and Partners was appointed to design the station

⁴⁰ King's Cross Station Redevelopment Programme, Network Rail Consulting



³⁷ St Pancras International Station, Redevelopment • Rail • Work • Pascall+Watson (pascalls.co.uk)

³⁸ 'St Pancras International' Alastair Lansley, Stuart Durant, Alan Dyke, Bernard Gambrill, Roderick Shelton, Laurence King ISBN 13: 978 1 85669 552 7

³⁹ St. Pancras International Tops National Rail Passenger Survey, HS1 Ltd (January 2020)

King 3 cross and 3t rancias

masterplan. There were however delays to the station design due to changeover of ownership from Railtrack to Network Rail, as well as redesign and construction works on the LU.

- 3.64 The works at King's Cross station began in 2007. By the following year, a geodesic steel and glass dome was constructed above the LU ticket hall, and line upgrades were completed in 2009. A new glass footbridge and escalators were also constructed to enable passengers to access platforms 1 to 8.41
- 3.65 A new Western concourse and refurbishment of 4,000 sqm of office space was completed in 2011. The concourse aimed to increase permeability and allow passengers to easily navigate between King's Cross underground station and St Pancras International. There was also an improved retail offering here, as can be seen in Figure 3.8.
- 3.66 Renewal of the train shed roof, completed in 2012, provided better lighting. In 2013, the final stage of the redevelopment was completed; a public square outside the station that would uncover the station's original façade.

Stakeholders interviewed argue that the public square may not have been developed the way it was, if it were not for the redevelopment of St Pancras station setting a certain level of ambition for King's Cross station.

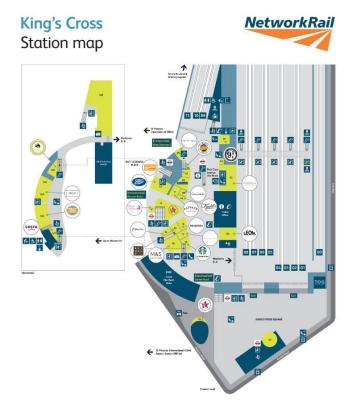


Figure 3.8: Current layout of King's Cross station

Source: National Rail

⁴¹ King's Cross Station Redevelopment Programme, Network Rail Consulting



Perceptions on how the study area has evolved

Note that the section below is largely informed by the stakeholder interviews we have undertaken.

- Prior to the redevelopments of the King's Cross and St Pancras stations, the King's Cross St Pancras area was perceived by some as being associated with crime, homelessness, and prostitution, a characterisation which had an alienating impact on many local residents⁴². As presented earlier in this Chapter, higher levels of deprivation were reported in this area at the time. It was a prime destination for going out, as the site being populated with warehouses and buildings made it a good location for nightlife usage. However, the commercial unattractiveness of the area was reflected in its office rental prices, with King's Cross having one of the lowest in central London around the 1980s (noting the limitations in finding relevant data for that period).⁴³
- The St Pancras Chambers, a Grade I listed building, were perceived to not portray an image of modernity. Originally the Midland Grand Hotel, which opened in 1873, it was an impressive display of Victorian architecture. Although, several decades later, it became a façade for St Pancras that was too expensive to maintain, and the internal chambers were not fit for purpose to provide accommodation. Consequently, the hotel eventually closed in 1935. The building was then occupied by British Rail offices, during which it almost got demolished in the 1960s. It remained somewhat run-down after the British Rail staff moved out of the building in 1983.
- 3.69 The neo-Gothic style is now embraced as part of the station's character, and the architecture and design can be seen today to incorporate many aspects of this.
- 3.70 The King's Cross site has retained and incorporated its Victorian era features. It is now a more attractive destination for employers, workers, students and shoppers, with annual footfall on King's Boulevard estimated in 2017 to reach 18 million by 2019⁴⁴, in line with Argent's vision to "create a place that would not only be good to work, but also a place to live, eat and shop"⁴⁵
- 3.71 Critically, it is important to acknowledge that, despite the positive impacts in the area reported by commercial developers including Argent, there are also negative impacts that redeveloping the King's Cross St Pancras area has had, and the ongoing debate over whether its transformation has led to gentrification⁴⁶.

⁴⁶ Marco Adelfio, Iqbal Hamiduddin & Elke Miedema (2020): London's King's Cross redevelopment: a compact, resource efficient and 'liveable' global city model for an era of climate emergency?, Urban Research & Practice



⁴² "King's Cross: renaissance for whom?" Michael Edwards (2009) in Urban Design, Urban Renaissance and British Cities, London: Routledge, chapter 11

⁴³ ULI Case Studies, King's Cross, Urban Land Institute (July 2014)

⁴⁴ Carhartt WIP opens a Special Projects store at King's Cross - King's Cross (kingscross.co.uk)

⁴⁵ Major study reveals social and economic value of King's Cross regeneration - Related Argent (argentllp.co.uk)

- 3.72 Research by the Urban Displacement Project⁴⁷ have classified two LSOAs that make up the majority of Zone 1 of our study area⁴⁸ as having experienced 'mainstream gentrification'.⁴⁹ The two LSOAs experienced an influx of relatively wealthier people and increasing income levels, whilst socially rented properties declined.
- 3.73 Not only residents, but also local businesses experienced displacement. More traditional local enterprises were replaced by higher-end businesses in a process of "upscale activity replacing downscale activity"⁵⁰.
- 3.74 The top-end accommodation and office spaces are likely to have increased the rental prices in neighbouring areas,⁵¹ making the surrounding areas unaffordable to live or work in. In light of this, it has been argued that regeneration of the King's Cross St Pancras area has not met the needs of the low- and middle-income people that it should have served.⁵²
- 3.75 Displacement effects are postulated in the logic map and our findings are further detailed in Chapter 8.

Figure 3.9: St Pancras International and King's Cross stations in 2006 (left) and 2020 (right)





Source: The Guardian 'Aerial views of London: then and now – in pictures'

⁵² "King's Cross: renaissance for whom?" Michael Edwards (2009) in Urban Design, Urban Renaissance and British Cities, London: Routledge, chapter 11



⁴⁷ London – Gentrification and Displacement – Urban Displacement

⁴⁸ LSOAs are E01000953 and E01000956.

⁴⁹ The Urban Displacement Project is a research and action initiative of the University of California Berkeley and the University of Toronto. The Centre for Advanced Spatial Analysis team at University College London analysed high-resolution data and contextualised gentrification at LSOA level in London. Mainstream gentrification relates to LSOAs with relatively lower incomes and house prices in 2001, with growth in percentage of residents from the top income tiers by 2011 and substantial declines in socially-rented properties.

⁵⁰ "King's Cross: renaissance for whom?" Michael Edwards (2009) in Urban Design, Urban Renaissance and British Cities, London: Routledge, chapter 11

⁵¹ "King's cross railway lands: A "good argument" for change?" Dave Brenner (2014), DPU Working Paper No. 171

4 Theory of Change

- 4.1 The redevelopment of both stations took place after the following rail investments: HS1 and the arrival of international and domestic high-speed services; connection with Thameslink; and reconfiguration of LU stations. Based on interviews with stakeholders, station investment was rail-led to accommodate future demand and provide capacity for station users.
- 4.2 St Pancras was chosen as the terminus for HS1, driven by several factors that have been captured in stakeholder interviews and documentation review. Regeneration was being planned for the East Thames corridor and St Pancras would be able to fulfil its own potential using available railway land. The opportunity to route near the North London Line was more feasible than formerly planned route alternatives and connectivity would be provided to the North and the Midlands.
- 4.3 The decision to locate the HS1 terminus at St Pancras was a catalyst for the regeneration of the King's Cross area, which contributed to the redevelopment of the area, following a Transit Oriented Development (TOD) model where the development itself also drives demand growth and the attractiveness of the area⁵³.
- 4.4 The links between the strategic drivers for change, the investments that took place at both stations and in the wider area and the impacts that all of these had on the levels of economic, social and recreational activity in the area surrounding the stations constitute the basis of the Theory of Change which we have postulated in this Chapter and which is informed by analysis undertaken in the following Chapters.
- 4.5 The Theory of Change for the scheme can be presented in several formats, one of the most common ones being via logic maps. The objective of the logic map is to establish a set of hypotheses about the causal linkages that explain how an intervention leads to the impacts that have been identified.
- 4.6 No theory of change was developed to support investment at the King's Cross St Pancras area and stations at the time, so for the purposes of this study we have postulated one that can then be evidenced by that data analysis taking place in the following Chapters. The Theory of Change is presented in the logic map in Figure 4.1 and described below.

⁵³ Railway Reform: Toolkit for Improving Rail Sector Performance Case Study: London King's Cross, The World Bank



Intermediate Context **Transmission** (strategic **Outputs Outcomes (transport Outcomes Impacts** Inputs Mechanisms drivers) user benefits) St Pancras Opportunity/problem Carbon and Station Future demand Increased rail demand environmental Transport demand Pedestrian movement redevelopment Pedestrian journey time growth impacts Increased walking and permeability (1996-2007) savings Transport impacts in area Station Sustainable Modal shift extension; access development to Eurostar Rail investments / impacts platforms; industry drivers Station retail / station as Thameslink Increased station area destination station; train Pedestrian ambience and Property / retail **Economic impacts** concourse Rail users shed renovation crowding benefits (also impacts Jobs to / between platforms Non-rail users Opportunity/problem safety benefits) Units /floorspace GVA / / services Development of (area / density) Agglomeration Wider area brownfield land Prices / Land value National and local regeneration Housing/office levels **Enhanced station** development; Increased attractiveness Commercial / jobs private sector quality / ambience / Station ambience / quality Regeneration & of location to: investment impacts facilities / waiting areas benefits (within station Development Displacement effects Developers Floorspace / ticket offices / shops / benefits) Displaced (commercial/ Jobs Information / lighting businesses housing) GVA / Displaced Businesses (occupiers) Agglomeration / Opportunity/problem King's Cross · Residents residents Productivity Poor built Station Visitors environment Improved urban realm Urban realm benefits redevelopment (between the station Housing / local (2007-2013) (outside station) and street) amenity Impacts Regeneration / place LU ticket hall Opportunity/problem dome; footbridge · Housing delivery **Impacts** Lack of Perception of place and escalators; Affordable housing Change nature / permeability Western Fundamental change in Cultural / identity of local concourse; how area is perceived entertainment Station design quality / area refurbished office Other unquantified benefits e.g. Area 'brand', reflected sector perception space; renewal of linked to perception of Station as a by types of occupier development (architectural / design train shed roof; station gateway to the (Google), attitudinal data Community quality) public square

Figure 4.1: Logic map underpinning Theory of Change linked to investment at King's Cross and St Pancras

Source: Steer

city



benefits / impacts

Strategic drivers

- 4.7 The Theory of Change for investment at the two stations was postulated to be initiated by three strategic drivers:
 - Rail investments: these are the investments which were necessary to accommodate future demand growth (on existing lines and through newly developed lines) and provide further track, platform and station concourse capacity⁵⁴;
 - Regeneration and development: this stems from the opportunity to develop brownfield land in the King's Cross OA, which combines a prime location in central London with one of the best served transport hubs in London⁵⁵; and
 - Station as a gateway between the railway and the city: where the station represents a gateway between investment on rail services and redevelopment and regeneration in the wider OA, with the station acting as a catalyst between both drivers.
- 4.8 The drivers were postulated based on stakeholder interviews and relevant documentation review. Chapters 5, 6 and 7 review data and seek to provide the causal linkages.

Inputs, outputs and intermediate outcomes of the investment

- 4.9 These three drivers are expected to have led to the station investment programmes at and around both stations ('inputs') described in Chapter 3, required to accommodate the organic and induced growth from those schemes. We expect regeneration around the area, another 'input', to have led to a greater scale of change relative to station investment. This includes the development of new homes and offices, and private sector investment.
- 4.10 This investment is expected to have resulted in a number of improvements to the stations and the wider area ('outputs') which in turn led to transport user benefits ('intermediate outcomes'), helping to realise benefits driven by rail investment and wider regeneration, as described in the previous section.
- 4.11 Linked to this programme of investment, expected outputs, associated with transport user benefits, are expected to include:
 - Improvements to pedestrian movement and permeability, measured in pedestrian journey time savings;
 - Increased station area in the concourses and at/between platforms, measured as an improved perceived pedestrian ambience and crowding benefits;
 - Enhanced station quality (including facilities, waiting areas, ticket offices, retail or information), measured as ambience benefits for station users;
 - Improved urban realm between the station and the street; and
 - Improved perception of the station design quality.

⁵⁵ Likewise, the availability of brownfield land was the driver of the wider regeneration programme in the area, which was part of the strategic context to redeveloping both King's Cross and St Pancras.



⁵⁴ From the perspective of investments in the rail infrastructure described in Chapter 3, the strategic driver was demand growth and how this could be accommodated. However, from the perspective of station investment, it is assumed that the decision to invest in the rail infrastructure had already been taken and is part of the strategic context, with the input to the station intervention being the actual schemes to redevelop King's Cross and St Pancras.

4.12 Some of these intermediate outcomes can be more easily measured, should the appropriate data be available, whilst others are more challenging to measure, such as the perceived quality of the design. However, the latter might have the same or a greater impact on the place-making function of the station to deliver its longer-term outcomes and economic impacts.

Outcomes and impacts of the investment delivered via transmission mechanisms

- 4.13 The intermediate outcomes are expected to lead to outcomes and impacts of the intervention, as described in the logic map.
- 4.14 Figure 4.2 below presents the transmission mechanisms that are expected to lead to scheme impacts in the case of investment at a railway station.

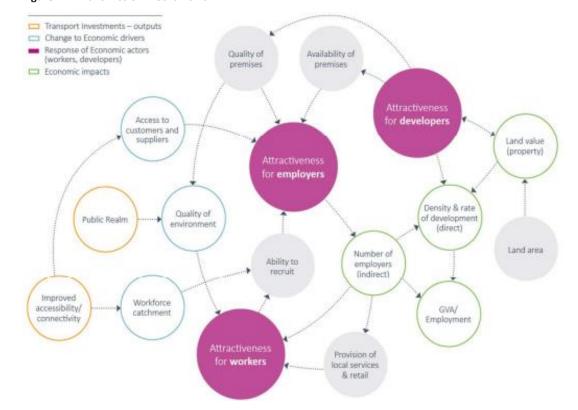


Figure 4.2: Transmission mechanisms

Source: Steer

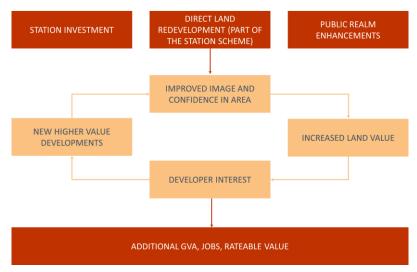
- 4.15 Improvements to accessibility and public realm quality (orange circles in the figure) lead to changes in the key economic drivers, including access to the customer and supplier base, the quality of the environment, and workforce catchment.
- 4.16 In the case of King's Cross St Pancras, this, along with a number of enabling factors and interventions, such as land availability, premises availability, quality of these premises and provision of local services and retail (circles in light grey), is expected to have led to increased attractiveness for employers, developers and workers (circles in purple).
- 4.17 This increased attractiveness is expected to have led to businesses and residents to move into the area, which is reflected in improvements in densities and rates of development, land value, number and types of jobs and productivity. In addition to these, the increased attractiveness is expected to have had an impact on the overall area regeneration and community, with an increased provision of social and affordable housing delivered in the area.



- 4.18 These attractiveness mechanisms are postulated in this chapter based on the stakeholder interviews and documentation review laid out in Chapter 3. Changes to the economic indicators reviewed in Chapters 5 and 6 underpin these attractiveness mechanisms, i.e. they are expected to show that the regeneration programme and station investment led to changes in the measured impacts over time that are greater than in other comparator locations.
- 4.19 The main three attractiveness mechanisms relate to increased attractiveness for employers, for workers and for developers. This is achieved by investment which improves the accessibility and connectivity of the station and the quality of the public realm around the station ('outputs'). This leads to:
 - A more attractive location for employers, which have more, better connected and higher
 quality premises to establish themselves and which can draw from a larger labour market,
 supply chain and customer base as appropriate;
 - A more attractive location for workers, who can access the area quicker and more conveniently; and
 - A more attractive location for developers, which can benefit from higher value properties and a more economically functional area.
- 4.20 There are catalytic and reinforcing effects between the three attractiveness mechanisms, as shown in the diagram above. Station investment plays a part in making the area attractive to businesses (for the consumer and the producer) and, in turn, the influx of businesses increases and reinforces the attractiveness of the area and the station itself.
- 4.21 As such, the expected outcomes and impacts of the intervention are expected to include:
 - Increased walking in the area and modal shift, promoting sustainable travel and better environmental impacts;
 - More floorspace area and increases in the value of land/property, generating economic impacts notwithstanding any potential displacement of local residents and businesses;
 - Employment opportunities, increasing GVA and productivity; and
 - Local amenities and increased housing supply changing the area's identity and generating place-making impacts.
- 4.22 The value creation and the perception/image of the area constitute a virtuous circle which lead to the scheme impacts, measurable in GVA, jobs and property value impacts. This mechanism is shown in Figure 4.3 below.



Figure 4.3: Virtuous circle of transport investment and development



Source: Steer



5 Transport outputs and benefits

Conventional transport benefits

- 5.1 Investment at St Pancras and King's Cross stations, as described in Chapter 3 and outlined in the logic map in Chapter 4, was primarily driven by the need to accommodate future growth in demand, as the stations were forecast to reach or exceed capacity in the absence of any intervention.⁵⁶
- 5.2 This included background growth plus additional demand from the HS1 and Thameslink services, as well as the inadequate configurations of the stations at the time constraining passenger movements.
- 5.3 Therefore, while the 'end state' forms of St Pancras and King's Cross stations was the result of a range of decisions and choices, any station investment solution would have had to be driven by the need to meet these core transport-led requirements.

Level 1 transport benefits

- The conventional transport benefits that would be expected from the transport interventions (i.e., changes to HS1, Thameslink, LU, and other rail services) would include journey time benefits and improved passenger flows within the station. These benefits are usually quantified in the business cases developed to inform the investment decisions.
- 5.5 Benefits linked to the transport interventions (i.e., HS1 domestic and international services, rail developments post HS1, changes to LU services) would have been captured in the business cases that were developed to inform investment; however, these are not part of the scope of this study, which looks at the station redevelopment and wider area regeneration and have therefore not been analysed.
- Therefore, the approach undertaken has been to analyse the evolution of demand for each of the stations over time and establish the potential causal linkages of these evolutions with the investment at the stations and the transport interventions listed above, as described in the approach to the study in Chapter 2.
- 5.7 In addition, growth in demand has been compared to growth in other London rail termini, particularly London Euston, London Paddington and Old Street. These stations have also been used as comparator stations in Chapter 7 and the rationale for selecting them has been described in Chapter 2, based on similarities but also differences with King's Cross and St Pancras in terms of the levels of rail investment and property market development around them.

⁵⁶ Delivering a Sustainable Railway, Department for Transport (July 2007)



Evolution of demand at King's Cross and St Pancras stations

The following graphs show station usage figures for King's Cross and St Pancras, covering National Rail and LU, as well as figures for Euston, Old Street and Paddington as comparator stations.

45 Euston Entries and Exits/Interchanges (millions) West Coast Main Line 40 upgrade completed 35 30 **Paddington** GWR timetable 25 change 20 15 St Pancras Opening of HS1, relocation of 10 Thameslink (15tph) & improvements to EMR services 5 0 2004.05 Kings Cross — St Pancras Paddington - Euston **Entries and Exits** --x-- Paddington --◆-- Kings Cross --■-- St Pancras ----- Fuston Interchanges

Figure 5.1: ORR station count data, King's Cross/St Pancras/Euston/Paddington, 2004-2019

Source: ORR for National Rail demand (boxes highlight key changes in rail service provision)

- 5.9 According to the ORR station usage data presented in Figure 5.1, St Pancras has experienced very strong growth in National Rail passenger numbers since 2008-09, when several changes came into effect including domestic HS1 services, additional services to Sheffield and Corby on EMR, and relocation of the King's Cross Thameslink station to St Pancras. Overall, there has been a 658% increase in passenger numbers at St Pancras since 2004-05, albeit starting from a very low base demand.
- 5.10 King's Cross has seen relatively modest growth over this period, with a period of levelling-off from 2007-2010 related to new open-access services being offset by the closure of the Thameslink station. Growth returned from 2011 onwards as the East Coast received a simplified stopping pattern and more open access services were introduced, before levelling off again around 2018 as several commuter services on the Great Northern line became cross-city Thameslink services and were rerouted via St Pancras.
- 5.11 Both comparator stations have experienced slightly higher absolute growth than King's Cross, beginning from a higher baseline. Euston saw strong growth from 2009 after the completion of the West Coast Main Line upgrade, including 3tph between London and Manchester/Birmingham, a new service to Chester and quicker journey times to Manchester (2 hours) and Glasgow (4 hours). As with King's Cross this growth levelled off around 2018. Paddington saw slow growth until 2019-20, when a major GWR timetable change introduced faster journeys and 29% more high speed services as a result of new trains being introduced.



- 5.12 Overall, changes in National Rail station usage at long-distance termini appear to be related to changes in journey opportunities (including service provision and journey times) rather than the quality of the station environment and surrounding area.
- 5.13 The figures below show the evolution in LU demand at King's Cross and St Pancras stations, as well as the comparator stations.

100 80 King's Cross/St Pancras Subsurface lines (2010-14) Entries and Exits (millions) Northern Line signalling (2014) King's Cross/St Pancras Improvements to Piccadilly and Station redevelopment 60 Victoria lines (2009-2017) programme 40 20 2007 2019

Figure 5.2: London Underground Entries and Exits, King's Cross St Pancras/Euston/Old St/Paddington, 2007-2019

Source: Transport for London – London Underground demand (key changes at King's Cross highlighted in the grey box; note that some of these changes also affect some of the other stations)

Euston

Old Street

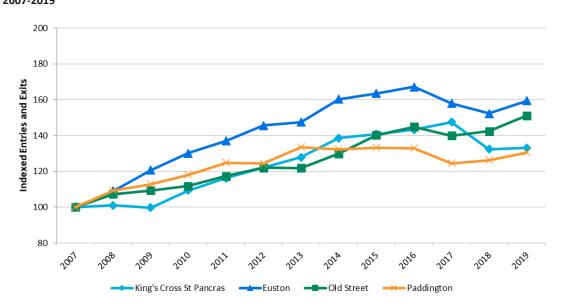


Figure 5.3: Indexed London Underground Entries and Exits, King's Cross St Pancras/Euston/Old St/Paddington, 2007-2019

Source: Transport for London - London Underground demand

King's Cross St Pancras



- 5.14 Relevant changes to Underground services which affect these stations include⁵⁷:
 - Subsurface lines (King's Cross St Pancras, Paddington): new trains from 2010-2014
 - Northern Line (King's Cross St Pancras, Euston, Old Street): new signalling permitting an additional 6tph from 2014
 - Piccadilly Line (King's Cross St Pancras): Heathrow T5 extension in 2008, 6tph Night Tube from 2016
 - Victoria Line (King's Cross St Pancras, Euston): new trains from 2009, new signalling permitting 33tph from 2013, 6tph Night Tube from 2016, new 36tph timetable from 2017
- 5.15 As shown in Figure 5.2 and Figure 5.3, LU station usage for mainline termini generally follows similar patterns to the mainline station usage shown in Figure 5.1. Station usage at King's Cross St Pancras has increased since 2007 (the year that online records began), particularly after the Underground station upgrade was completed and domestic HS1 services arrived at St Pancras in 2009. Usage increased steadily from 2009 to 2017 before levelling off and dropping slightly from 2018. The first figure shows that investment at King's Cross did have an impact in the steady pace of demand growth in the early 2010s, in addition to the changes in LU services.
- 5.16 In absolute terms, LU station usage at comparator stations has remained well below King's Cross St Pancras. However, the indexed data in Figure 5.3 shows that the relative increase in station usage has been higher at Euston than King's Cross St Pancras, corresponding with increased National Rail station usage. Old Street also overtook King's Cross St Pancras in 2018, continuing a trend of growth from 2014 onwards after Northern line signalling improvements permitting more services and redevelopment of the area as a centre for information technology. This is not unexpected, given that the starting demand for the comparator stations was much lower than for King's Cross, so this is consistent with the analysis of absolute demand.

Findings

- 5.17 Analysis of National Rail and LU demand shows that usually demand growth over and above background growth is linked to significant changes in the rail services provision. However, as shown by the LU data at King's Cross St Pancras, investment at the station can act as a catalyst for growth in demand (and equally a lack of investment at the station can act as a barrier for demand growth).
- 5.18 Investments at the stations led to greater volumes of passenger demand, who are expected to have shifted from other modes and constitute induce demand; this translates into conventional transport benefits, including journey time benefits for existing passengers departing from or arriving to these two stations, as well as for new passengers that were not planning to travel prior to the transport investment.
- 5.19 Likewise, the redevelopment of both stations is expected to have improved the flow of passengers within the stations, potentially leading to time savings when transiting through and within the station, although there is no data available underpinning this.
- 5.20 These journey time benefits for journeys between stations as well as in relation to movements within the station are part of the conventional transport benefits (known in TAG as Level 1 transport benefits).

⁵⁷ Note that entries and exits data is not available per LU line.



- 5.21 Transport benefits of these schemes would therefore be associated with the increases in demand and improvements in passenger flows within the station.
- 5.22 While it is not easy to link these specifically to improvements in the stations themselves, as these act as an enabler of the benefits delivered by the wider rail enhancement schemes, it can be observed that the joint improvement of rail provision and station has contributed to substantial growth in demand over time for King's Cross and St Pancras.



6 Retail impacts

The redevelopments at St Pancras and King's Cross stations and in the wider King's Cross area provided significantly more attractive retail experiences to passengers and the wider public. This Chapter identifies the retail-related impacts of the redevelopment of the stations and demonstrates that the redeveloped stations attract non-rail users as well as passengers in using retail at the stations.

St Pancras retail offer

- 6.2 St Pancras provides a premium retail experience, with 55 retailers inside the station including Chanel, Fortnum & Mason, Hamleys and L'Occitane. The station also provides a high-end food and drink offer, including a premium restaurant in the historic station building and the longest champagne bar in Europe, Searcy's. This retail offer was perceived by stakeholders interviewed as innovative for a rail station.
- 6.3 St Pancras station achieved 93% passenger satisfaction in Transport Focus' National Rail Passenger Survey (NRPS) 2020. The rating is based on several aspects of station performance. Figure 6.1 shows how St Pancras ranks amongst the top 20 Network Rail managed stations; it is the third highest performing station.⁵⁸

Figure 6.1: Overall satisfaction with Network Rail managed stations, Spring 2020

Source: Transport Focus data

6.4 From our analysis of Transport Focus data⁵⁹, St Pancras has been consistently ranked, since 2013, as having a good choice of shops/eating/drinking facilities available (one aspect of station

⁵⁹ Transport Focus data hub



⁵⁸ Managed stations performance, Network Rail

King's Cross and St Pancras

performance). Figure 6.2 shows that St Pancras' rating is higher than comparator stations Euston and Paddington.

100% 89% 90% 83% 76% 80% 68% 70% 60% 50% 40% 30% 19% 16% 20% 13% 12% 8% 8% 10% 4% 4% 0% London King's Cross London Paddington London St Pancras **London Euston** ■ Neither good nor poor ■ All good All poor

Figure 6.2: Rating of choice of shops/eating/drinking facilities available at passenger origin stations, Spring 2020

Source: Transport Focus data

6.5 The high-quality retail offer in St Pancras has turned it into a destination also for non-rail passengers. In 2019, one in six visitors to St Pancras were using the station for purposes aside from taking a train.60

King's Cross retail offer

6.6 The redevelopment at King's Cross station introduced around 470 sqm of retail space, as well as quadrupling the size of the concourse from 2,000 to 8,000 sqm to increase the area for users to navigate around the station.

Stakeholders interviewed note that the approach to retail was more functional, i.e., food and beverage focused, than at St Pancras.

- 6.7 While the approach to retail might be considered to be more functionally focused than that at St Pancras, with 26 retailers at the station focused mainly on providing food and drink for passengers, the retail offer at King's Cross has a high reputation among Network Rail's Managed Stations, with the fifth best satisfaction score in Spring 2020 (90.8%, based on the NRPS⁶¹), as can be seen in Figure 6.1.
- 6.8 This level of customer satisfaction and growth in retail income, according to Network Rail, can be linked to the redevelopment at the station as well as their retail strategy to increase its value.

⁶¹ Managed stations performance, Network Rail



⁶⁰ St. Pancras International Tops National Rail Passenger Survey, HS1 Ltd (January 2020)

Network Rail reported that total station sales grew by 11% in 2017⁶² and that King's Cross was in the top five across all stations; this was attributed to investment at the station and their retail strategy. Network Rail have placed emphasis on retail-related strategies to enhance income, as detailed in their Strategic Business Plan – Property Income Forecast Review 2018⁶³.

- 6.9 In addition, the 27 ha King's Cross site has 46,400 sqm of retail and leisure space overall, as part of a mixed-use development that also includes office and residential buildings. Coal Drops Yard, formerly the location of popular nightclubs, is a retail complex on the site that was completed in 2018 and combines a restauration and high-quality retail offer.
- 6.10 According to a World Bank study, the public realm is high grade but also open, democratic and accessible. The site was developed as a collection of public spaces, designed to be lively throughout the day thanks to the presence of a community of creative students, retail and restaurants, with retail, bars, cafes and restaurants at ground level.⁶⁴

Comparative analysis of retail rent values and stock

6.11 In the wider area, the King's Cross Central development has seen major new retail provision delivered at Pancras Square (focused on food and beverage), Coal Drops Yard (focused on higher end, independent retail) and around Granary Square (a mixture of food and beverage and convenience retail).

Retail market: expert view/narrative

A qualitative assessment of how perceptions of retail in the King's Cross St Pancras area after the regeneration programme is provided below. This is informed by Avison Young's expert views on the commercial property and retail markets, based on their knowledge and expertise in this sector.

- These changes in provision of retail space in and around the stations have had an impact on the performance of the retail market, both quantitatively and qualitatively, based on Avison Young's experience. As noted above, within St Pancras station, there has been a focus on high quality retail, often centred around providing Eurostar users with a retail offer akin to an airport departure lounge.
- 6.13 Within the wider area, again there has been a shift in quality (based on the number and type of retail outlets currently present in the area), reflecting the increased footfall from residents, workers and commuters through and to the area. An example of this is the Waitrose at King's Cross at Granary Square which, despite remaining a convenience food store, has been delivered in a different format and includes a cookery school, significant fresh produce offering, a wine

⁶⁴ <u>King's Cross Central: in London a major place value creation around London's major and most</u> accessible hub, Serge Salat and Gerald Ollivier (June 2015)



⁶² <u>Total retail sales for Network Rail managed stations grew by 3.5% in final quarter of 2017, Network Rail (March 2018)</u>

⁶³ Network Rail Strategic Business Plan Property Income Forecasts Review, Office of Rail and Road (May 2018)

bar and a range of other 'service' provisions that are not normally found in food stores. This is a reflection of the type of stores that have relocated to the area.

- 6.14 Coal Drops Yard represents another shift in the retail offer, with its retail line-up curated to provide space for a large number of higher quality independent and small retailers, with a particular focus on fashion. This is complemented by a similarly orientated food and beverage offer that focuses on smaller outlets.
- Again, this retail offer reflects the changed economic position of the area, with significantly more people living, working and visiting the area and with higher disposable incomes to spend. Critically, this has also changed the position of the area in the retail 'hierarchy' of Central London (linked to the evidence base developed for the Camden Borough retail policies). Coals Drops Yard in particular (but also St Pancras station to a degree) has made the area a destination for visitors, including students, workers and families drawing people to the area for shopping, rather than solely focusing on meeting the shopping needs of people already in the area. This has nonetheless had knock-on impacts on a number of previous residents in the area, who have been displaced by the increase in overall prices of the area, leading to a gentrification effect (see paragraph 3.72).

Retail rental market: quantitative analysis

6.16 From a quantitative perspective this shift has had a considerable impact on the scale and performance of the retail rental market in the area, as shown in the chart below.

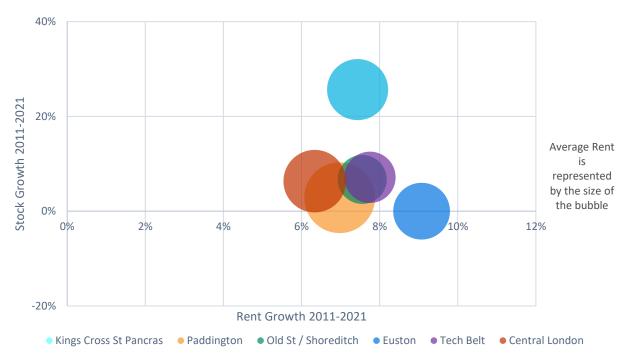


Figure 6.3: Retail Market Performance 2011-2021

Source: CoStar data⁶⁵, 2022



⁶⁵ CoStar is the industry standard source of commercial data in the UK and is considered by industry experts to be reliable and robust across the commercial, planning and economic industries. The analysis

- 6.17 Over the 10-year period to 2021, King's Cross St Pancras has seen a significant rise in the amount of floorspace stock compared to other comparator locations. The amount of floorspace in the area increased by 26% over the period, meaning that, at the end of 2021, it had a total stock of circa 775,000sqft of space, making it a much more significant retail centre than Paddington and Euston historically Paddington had accommodated more retail space than King's Cross St Pancras.
- 6.18 In all other locations there has been little or no growth in stock of retail floorspace, reflecting the general challenges facing the retail market, where there has been a significant amount of contraction and/or stagnation of demand for space. In most comparator locations there has been modest growth in provision of c.6-7%, however it is notable that Paddington has seen lower growth at 3% (suggesting the market is relatively satisfied) and Euston has seen no overall growth (which may in part be a result of space 'lost' as development happens for HS2).
- As also shown in Figure 6.3, at the same time as stock has grown, so has average rent, as measured as a value per square foot. Rental growth in the area has been c.7% over the period, which is broadly reflective of the other areas considered, which tend to be between 7% and 8%. Euston has performed slightly above at 9%, which appears to be a result of more recent letting activity at the station, and also the provision of space within Regent's Place which have achieved higher rent there may also be some impact linked to the supply constraints noted above.
- Overall, average rents in King's Cross St Pancras in 2021 reached £63.50/sqft making it one of the highest value retail areas considered in this report, with only Paddington achieving significantly higher rents (£85.19/sqft) the average across Central London is broadly comparable at £66.61/sqft. Despite its stronger rent growth Euston remains a 'cheaper' retail location with rents of £54.82/sqft. Average rents are represented by the size of the 'bubble' in Figure 6.3.
- 6.21 The other key indicator of market performance is the level of vacant space within the built stock; against this measure King's Cross St Pancras has again performed comparatively well.

presented here has been built up from individual (building/commercial deal specific) data points. This is a typical approach from clients across government, local authorities and the private sector.



4% 3% 2% 1% 0% -1% -2% -3% -4% -5% Kings Cross St Paddington Old St / Tech Belt Central London Euston Shoreditch **Pancras** ■ Vacancy ■ Vacancy Change

Figure 6.4: Retail Space Vacancy 2011-2021

Source: CoStar data, 2022.

- As shown in Figure 6.4, the prevailing vacancy rate at King's Cross St Pancras is 1%, lower than the majority of comparator locations with Paddington and Central London presenting the highest vacancy rates at 2.8% and 2.5% respectively. There has also been a marked improvement in the level of vacant space over time, falling by almost 4%, indicating a significant increase in demand for space in the area.
- Overall, as summarised in the following table, the changes at King's Cross St Pancras, driven by a combination of transport improvements, the place-making/development investments they unlocked and also wider shifts in the market, have supported a significant improvement in the retail offer and market performance at King's Cross St Pancras. Across all the indicators, King's Cross St Pancras is now performing generally in line with comparable locations, indicating that the local dynamics are having an impact on the sector locally.

Table 6.1: Summary Retail Market Data

	Average rent per sqft in 2022		Rent Change 2011-2021	Stock Change 2011-2021	Vacancy rate in 2022	Vacancy Change 2011-2021
King's Cross St Pancras	£	63.50	7%	26%	1.0%	-3.9%
Paddington	£	85.19	7%	3%	2.8%	-1%
Old St / Shoreditch	£	40.87	8%	7%	1.6%	-1%
Euston	£	54.82	9%	0%	0.8%	-1%
Tech Belt	£	44.87	8%	7%	1.6%	-1%
Central London	£	66.61	6%	6%	2.5%	0.9%

Source: CoStar data, 2022.



7 Regeneration impacts: Property, jobs and GVA

7.1 This Chapter analyses the impact of investment at the King's Cross and St Pancras stations on the regeneration of the area, measured through the impacts on the commercial property (offices) and residential property, employment market (number and types of jobs) and economic output (GVA), as well as on the housing delivery aspects.

Approach for the impact assessment

- 7.2 To do this, several datasets have been analysed to establish the regeneration-related impacts of investment at King's Cross and St Pancras stations. These have been presented in Table 2.2 in Chapter 3. Limitations to the data, such as missing values or narrow time periods, are described in the relevant sections.
- 7.3 To assess the impacts of the station investments, the different metrics have been analysed over time, establishing when and how the different interventions (e.g., changes in rail services, redevelopment of the stations, etc.) have impacted the property and employment markets.

Study area

7.4 The different indicators have been measured within the study area described in Chapter 2. This has been subdivided in four subzones to analyse the core impacts in the OA and the spill over effects in the adjacent area. Table 7.1 shows the classification of Zone 1 and Zones 2, 3 and 4 (the spill over areas) by MSOAs.

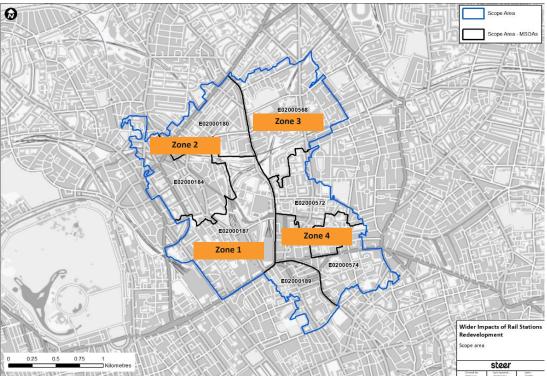
Table 7.1: Classification of study area Zones

Zone	Region	MSOA	
1	Includes OA	E02000187	
2	Northwest of OA	E02000180 E02000184	
3	Northeast of OA	E02000568	
4	Southeast of OA	E02000189 E02000572 E02000574	

7.5 The map in Figure 7.1 illustrates how the scope area is divided at an MSOA level.



Figure 7.1: Zones within the Study Area



Source: Defined by Steer, based on MSOAs in the vicinity of the stations

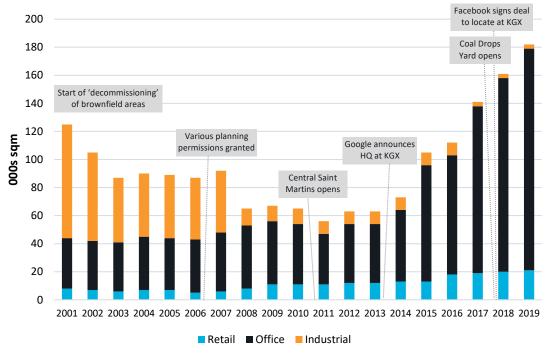
Data has been analysed at two different levels: (1) comparing the four subzones described above against each other; and (2) comparing the entire study area against the boroughs of Camden, Islington, and inner London, as well as the comparator stations defined in Chapter 3. This provides an overview of, on the one hand, the difference between direct and spill over effects, and, on the other hand, the performance of the King's Cross OA with other areas and stations in London.

Commercial property

- 7.7 To assess the impacts on commercial property, data from the Valuation Office Agency, CoStar, Egi Radius, Investment Property Database and Real Capital Analytics has been analysed, to determine the changes in floorspace and rateable value.
- 7.8 Overall, Zone 1 (the King's Cross OA) has seen a significant increase in floorspace between 2001 and 2019. Figure 7.2 illustrates that there has been a transition in land use from largely industrial to office use. This reflects the substantial take up of office space on the site in recent years. The industrial sector has seen a dramatic decline, particularly between 2007 and 2008, which coincides with the beginning of the infrastructure works on the King's Cross site, as well as the King's Cross station redevelopment.
- 7.9 In addition, Google announced in 2013 that their new headquarters would be located at King's Cross, and as the graph shows, other large organisations also located their offices in this area.



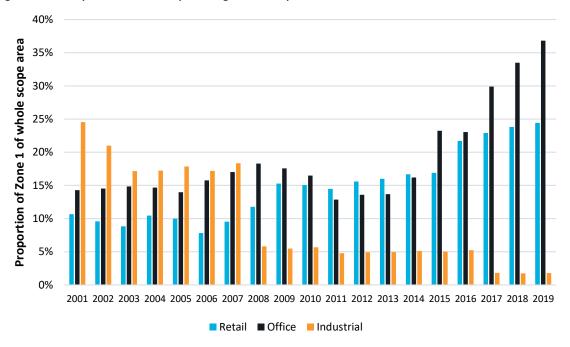
Figure 7.2: Floorspace in Zone 1



Source: Valuation Office Agency (boxes in grey indicate Opportunity Area milestones)

7.10 Figure 7.3 presents the proportion that Zone 1 represents in the overall study area for each type of commercial floorspace. It shows that Zone 1 accounted for over a third of office related floorspace and nearly a quarter of retail related floorspace in the scope area in 2019, dominating the retail and office offer in the overall scope area.

Figure 7.3: Floorspace in Zone 1 as a percentage of the scope area



Source: Valuation Office Agency. Note that the remainder proportion (up to 100%) is made up of properties within sub-sectors which include education, health, accommodation or transport.



- 7.11 Figure 7.4 shows the trends in rateable value per square metre across all sectors and compares it against the boroughs of Camden and Islington, inner London and greater London. The graph shows that Zone 1 (the OA) has seen a rapid increase in rateable value since 2001, increase by over five times. This is not unexpected, given that the area was composed of mainly brownfield land and reflects the high-quality new offices, the surrounding public realm, and greatly increased transport connectivity of the area.
- 7.12 By 2019, Zone 1 had the highest rateable value across the comparator areas shown in the graph. This also had an effect on the surrounding subzones within the study area, bringing the average rateable value for the whole study area to values close to the average of inner London and Camden, and greater than Islington and greater London.

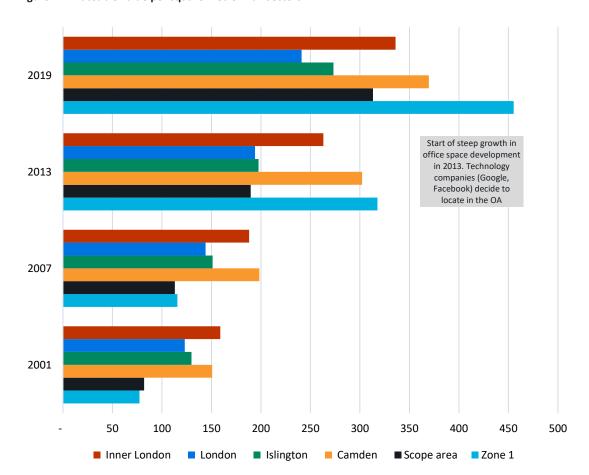


Figure 7.4: Rateable value per square metre in all sectors

Source: Valuation Office Agency

- 7.13 Focusing on the office sector in Figure 7.5, a similar pattern for Zone 1 is observed. Notably, by 2019, the scope area has a higher rateable value than inner London, demonstrating the weighting of Zone 1 in the overall scope area as well as knock on impacts on the spill over Zones.
- 7.14 The increase in rateable value in the office sector is reflected in the high-value offices with attractive surroundings and connectivity, which has implications for the employment sectors that dominate the area, as well as displacement of local businesses, which are explored later in this chapter.



7.15 It is worth noting that there are instances where office sector data is missing for two LSOAs in the scope area.

2019 2013 2007 2001 400 600 100 200 300 500 O

Figure 7.5: Rateable value per square metre in the office sector

Source: Valuation Office Agency

■ Inner London

London

The office market

7.16 This section combines a market narrative informed by the expert view of our office market experts and a quantitative data analysis. These are differentiated in the sections below.

Islington

Camden

■ Scope area ■ Zone 1

Avison Young have expertise in monitoring the London office market, with insight into data and trends across the sector. This long-term knowledge and understanding of the office market has enabled us to provide commentary on the changes across the markets and submarkets. Where possible, we have provided additional evidence from other experts to back up our findings.

- 7.17 Drawing on the comparator locations set out within the methodology section, we present below comparison data for the office market, reflecting the Central London 'sub-markets' which are understood to represent distinct locations driven by particular assets and characteristics.
- 7.18 Understanding the broader market context over the past decade is key to interpreting the data presented below. Over this period there have been significant changes to the make-up of the London economy which has, in turn, opened up new demand in locations previously not considered to be part of the Central London market – with King's Cross St Pancras being a prime example of this.



Expert view/narrative

- 7.19 The rapid expansion of the digital and technology sectors, coupled with strengthening and diversification of the life sciences sector has broadened London's economic base away from a more traditional focus on finance, insurance and business services. From a market perspective this has increased the overall demand for office space, but also driven new forms of demand in terms of both the space occupied and what locations are attractive⁶⁶.
- 7.20 The most high-profile example of this change in geography was the focus on 'Silicon Roundabout' around 2010, when a government focus was placed on supporting the already strong and expanding cluster of tech firms around Old Street and the northwest of Shoreditch.
- 7.21 Whilst this area gained the initial profile, it was reflective of a much broader trend of these businesses seeking more affordable space, at scale, in locations that were previously considered 'fringe' at best, mostly located to the north and east of the CAZ. This was a marked move away from the traditional markets of the West End and the City/Canary Wharf.
- 7.22 The market in these 'fringe' locations (which include King's Cross, Clerkenwell, Shoreditch and Aldgate/Whitechapel) built on smaller scale, creative business activity that had created a different character and attracted creative and highly skilled workers. Over the past decade these locations have become amongst the strongest performing in London, attracting a series of major occupiers to further heighten demand.

Quantitative data analysis

7.23 Against this context, a number of comparators have seen strong market performance across range of market indicators, as shown in Figure 7.6.

⁶⁶ https://www.centreforcities.org/wp-content/uploads/2014/08/13-10-10-Inner-Londons-economy.pdf



160% 140% 120% Stock Growth 2011-2021 100% Average Rent is 80% represented by the size of the bubble 60% 40% 20% 0% 20% 120% 0% 80% 140% 160% -20% Rent Growth 2011-2021 Kings Cross St Pancras
 Paddington
 Euston Tech Belt
 Euston
 Tech Belt
 Central London

Figure 7.6: Office Market Performance (2011-2021)

Source: CoStar data, 2022

- 7.24 Over the past decade, King's Cross St Pancras has significantly outperformed the comparator locations. The sub-market has seen a 137% increase in floorspace stock and now accommodates 6.4mn sqft of office space. This growth makes it a more significant office location than both Paddington and Euston, which have traditionally been larger sub-markets around the fringes of the CAZ and, in 2011, both contained more office space than King's Cross St Pancras. A significant portion of this is the new Google HQ which is a major driver of the market locally.
- 7.25 The marked difference in growth reflects the different land supply context, with King's Cross St Pancras offering (in effect) vacant land to deliver office meaning all space is 'additional' and results in stock growth. In other locations the delivery of new office often requires the redevelopment of existing stock, therefore the overall change in stock may be lower, even if there is a significant upgrade of stock.
- 7.26 At the same time, rents have also seen significant change. In general, the 'new' focus on the 'fringe' described above has seen rents in locations such as King's Cross, Euston, Shoreditch, the wider 'Tech Belt' all outstrip the London average with most having returned 100%+ increases in rent (the Tech Belt reached 92%) compared to an average of 51% across the CAZ.
- 7.27 Even against this general rising market in the fringe, King's Cross St Pancras has performed particularly strongly, with average rents increasing 124% and reaching £67.25/sqft in 2021, the highest level of any comparator location, suggesting there a locationally specific factors enhancing the market here.
- 7.28 Despite this rapid expansion of office stock, the market continues to be strong at King's Cross St Pancras, as reflected in the average vacancy levels in the area.



10% 8% 6% 4% 2% 0% -2% -4% -6% Old St / Kings Cross St Paddington Euston Tech Belt Central London **Pancras** Shoreditch ■ Vacancy ■ Vacancy Change

Figure 7.7: Office Space Vacancy – 2011-2021

Source: CoStar data, 2022

- 7.29 As shown in Figure 7.7, King's Cross St Pancras has one of the lowest office vacancy rates of all the areas considered, with the exception of Euston, where a number of factors are influencing occupancy not least the removal of some space from the market to enable HS2 delivery. At 3.1%, King's Cross St Pancras' vacancy rate is less than half that experienced by Old Street / Shoreditch (8%), the Tech Belt (7%) and Central London overall (7.2%).
- 7.30 In terms of the movement in the level of vacancy, King's Cross St Pancras has remained relatively stable despite the rapid increase in space provided, suggesting there is strong demand and the space delivered continues to be well aligned to occupier needs.
- 7.31 Vacancy has increased by 0.5% which is significantly lower than the comparators. Paddington has seen a significant reduction in vacancy over time, however in 2011 the rate was high for London at 10% and is now more in line with market norms. There are two potential contributors to this; the first is the delivering of speculative space into the market which has sat vacant for a period of time before letting; the second is the area retained older stock which has since been redeveloped as modern office space or residential.
- 7.32 Overall, it is clear that King's Cross St Pancras has performed above Central London generally and the specific comparator locations in terms of office market indicators, even against a generally strengthening market in fringe locations.

Based on Avison Young's experience, this is primarily a result of occupiers viewing King's Cross St Pancras as a superbly connected location (which helps access a large skilled labour force) that



delivers high quality space and environment with a range of amenities that support the attraction and retention of talent⁶⁷.

Table 7.2: Office Market Summary Data

	Rent per sqft 2021		Rent Change 2011-21	Stock Change 2011-21	Vacancy 2021	Vacancy Change 2011-21
King's Cross St Pancras	£	67.25	124%	138%	3.1%	0.5%
Paddington	£	54.88	34%	18%	4.9%	-5%
Old St / Shoreditch	£	53.84	114%	29%	8.0%	4.6%
Euston	£	59.25	100%	10%	1.6%	0.3%
Tech Belt	£	53.31	92%	25%	7.0%	1.6%
Central London	£	61.98	51%	5%	7.2%	1.0%

Source: CoStar data, 2022

The residential market

- 7.33 Development at King's Cross St Pancras has not solely focused on commercial space, with much of the development also creating a mix of residential units across private sale, affordable housing and student accommodation. Indeed, alongside education space, residential development was the first to be delivered at King's Cross St Pancras, with the first residents moving in during 2012, including those within an affordable housing development.
- 7.34 Analysis of the residential market performance is somewhat more complex than commercial markets given the much wider variation of residential typologies and values within and between areas. Therefore, to try to create a consistent basis for comparison, we present here both average house values and also average values per square metre (sqm) to try and 'control' for any differences in the unit mix in any location.
- 7.35 Starting first with average values (i.e., the price people pay for a flat or house), King's Cross St Pancras has seen significant growth over the last 10 years, with values going up by 125% and now valued at an average of £808,600.

⁶⁷ https://content.knightfrank.com/research/1936/documents/en/kings-cross-market-insight-report-2020-7034.pdf



£1,200,000 140% 120% £1,000,000 100% £800,000 For each station, the 80% circle £600.000 represents the change 60% in price per £400,000 sgm 40% between 2011 and 2021 £200,000 20% £0 0% Kings Cross Paddington Old St / Central Euston Camden St Pancras London Shoreditch

Figure 7.8: Residential Market Performance – Average Values (2011-2021)

Source: Land Registry data, 2022.

- 7.36 Compared to the other areas, this is a significantly higher level of growth; the comparison to the rest of Camden borough and Central London is a particularly important comparison as it shows how King's Cross St Pancras has strengthened as a residential location in the context of those larger market areas.
- 7.37 The value change in and of itself is also interesting to consider in terms of understanding how King's Cross St Pancras has been 'repositioned' in the market. In 2011, average residential property price for all dwellings was just under £360,000 making it the lowest value location considered other than Central London where values were c.£345,000. However as shown in Figure 7.8 it is now on a par with Camden borough and the third highest value location considered with values in the region of 30% higher than Central London generally.
- 7.38 Performance overall on a per square metre basis has been similarly strong at 112%, albeit marginally lower than the average value change. This is likely to be driven by a shift in the unit mix over time to deliver more smaller residential units.



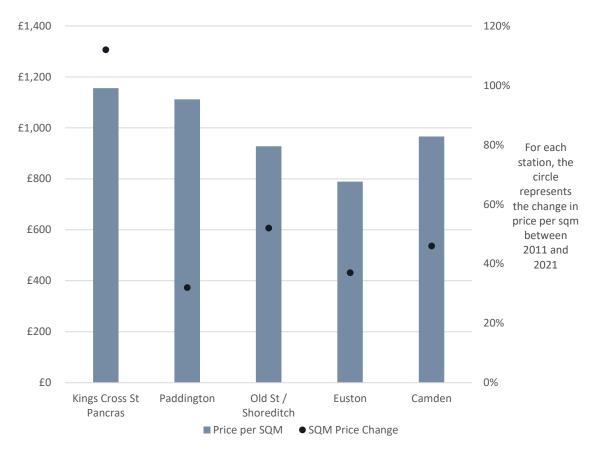


Figure 7.9: Residential Market Performance – Values per Square Metre (2011-2021)

Source: Land Registry data, 2022.

- 7.39 What is noticeable in this data compared to the average house prices is that the absolute values are higher in King's Cross St Pancras than all other locations, meaning that, irrespective of the unit mix, King's Cross St Pancras is a more strengthened market given that it started with the lowest values per sqm.
- 7.40 Overall, the data is relatively clear in demonstrating that King's Cross St Pancras has performed above any of the specific location benchmarks and the broader market averages, both in absolute terms and in terms of growth in values, demonstrating a sustained growth in demand for residential development.

Developments and planning consents

- 7.41 Analysis of planning consents, floorspace/residential units consented and proportional mix of uses indicates that King's Cross St Pancras presents a more commercial development environment than comparator areas. This is reflected both in quantum terms when viewed against direct comparators, and proportionally when placed in the context of residential units/floorspace against comparators.
- 7.42 More detailed analysis of the data indicates two key factors supporting these trends:
 - Firstly, the outline consent in 2006 drove a large quantum of mixed-use commercial floorspace versus comparators. As indicated in the analysis, the stark nature of this trend should be tapered by the knowledge that delivery of this floorspace was phased. Similarly, when viewing proportional mix of uses, residential uses are under-represented in the



- period after 2006. Even taking account of these caveats, the masterplan drove a significant commercial focus in the area.
- Secondly, there has been a large quantum of purely commercial floorspace consented from 2006 through to 2020. Whilst the approval of reserved matters applications relating to the 2006 outline consent has played a strong role in this activity, a total of 175,387sqm of non-residential floorspace was consented with no direct relationship to the masterplan. This indicates the creation of a self-sustaining commercial development environment, benefitting from the investment in rail infrastructure at King's Cross.
- 7.43 Whilst it is challenging to establish a causal link between rail infrastructure investment and commercial property development, this analysis suggests that the rail investment inputs did lead to regeneration impacts in the property market, as postulated in the logic map.
- 7.44 Further detailed analysis on development data can be found in the Appendices.

Employment

- 7.45 Data from the Business Register and Employment Survey (BRES) has been analysed to determine trends in total employment based on the businesses present in the area. The data is available at an LSOA level and by 2-digit employment sector⁶⁸, from 2009 onwards⁶⁹. The more disaggregated the classification and the smaller the area, the less reliable the data is, due to rounding for confidentiality reasons. Therefore, the data has been analysed at a broad sector level, whilst referring to the corresponding 2-digit classification for further insight.
- 7.46 Below, Figure 7.10 shows the total employment across the four subzones within the study area for each year between 2009 and 2019. Zone 4 consistently has the largest proportion of employment (around 47% of all employment in the study area in 2019), but it is Zone 1 that sees that highest growth rates, with employment increasing by a factor of 3 in the 10-year period between 2009 and 2019. The data analysis from BRES shows that within this Zone, broad sectors that employ the largest number of people are professional, scientific and technical; accommodation and food; and information and communication.

⁶⁹ Employment data from 2015 onwards is based on the 2011 census, whilst employment data between 2009 and 2014 is based on the 2001 census, which excludes units registered for PAYE only. There is therefore a discontinuity in the time series.



⁶⁸

 $[\]frac{https://www.ons.gov.uk/methodology/classifications and standards/ukstandard industrial classification of economic activities/uksic 2007$

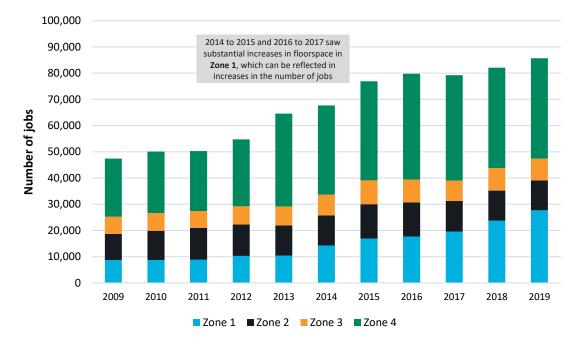


Figure 7.10: Total employment in the scope area, 2009-2019

Source: Business Register and Employment Survey (BRES). See footnote 69 for limitations in data for the time series.

- 7.47 Total employment has increased in Zone 1, the OA, from 8,700 in 2009 to 27,700 in 2019. Figure 7.11 focuses on total employment for Zone 1 by its main sectors, to understand the basis of its standout increase.
- 7.48 The sector in Zone 1 that has seen the largest increase in employment in recent years is the information and communication sector (from almost non-existent in 2009 to being the second largest sector in 2019). This is due to growth in motion picture, video and television programme production, sound recording and music publishing, computer programming, consultancy, and information services.
- 7.49 The other sector that has experienced substantial growth is the professional, scientific, and technical sector, which has grown nearly six and a half times between 2009 and 2019. This is due to growth in management consultancy businesses, head offices, and advertising and market research organisations.
- 7.50 The financial and insurance sector has experienced very significant employment growth between 2009 and 2019, due to growth in financial services, but still remains a minority sector in the area (with other areas such as the City of London and Canary Wharf dominating this type of employment sector).



5,000 4,500 4,000 3,500 IT&C and professional: 'Boom' in relocation of IT&C and 3,000 Number of jobs professional services companies **Granary Square** 2,500 complete 2,000 1,500 Retail: Coal 1,000 Drops Yard opens 500 0 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 10: Information & communication ▶11 : Financial & insurance 13: Professional, scientific & technical 7 : Retail ■16 : Education 9 : Accommodation & food services ■ 18 : Arts, entertainment, recreation & other services

Figure 7.11: Employment by main sectors in Zone 1

Source: Business Register and Employment Survey (BRES). See footnote 69 for limitations in data for the time series.

Comparative analysis

- 7.51 Figure 7.12 below compares the growth of employment in the King's Cross OA and the wider spill over area with the comparator stations in this study. Data is only presented from 2015 onwards due to lack of consistency in the definition of LSOAs before this.
- 7.52 The graph shows that, while growth in employment has not been low in this period for the comparator stations (i.e., 10% to 15% growth between 2015 and 2019), including the wider comparator area for King's Cross St Pancras. However, it can be seen that growth in employment in Zone 1 has largely exceeded this, as was shown in previous graphs, with particular sectors experiencing very substantial growth.
- 7.53 This is a result of brownfield land which has been developed to accommodate more commercial space capacity than other locations. As analysed earlier, other comparator areas have not had the same growth in floorspace stock therefore employment growth is more constrained.
- 7.54 It should however be noted that there might be some variances in the areas around each of the stations have been defined. Whilst a similar number of MSOAs around each station have been selected, the market conditions in different parts of London may vary, so this needs to be considered when analysing the results below.



170 160 150 Growth in number of jobs 140 130 120 110 100 90 80 2015 2016 2017 2018 2019 Old Street Euston Paddington - Scope area Zone 1

Figure 7.12: Growth in employment across all comparator rail stations

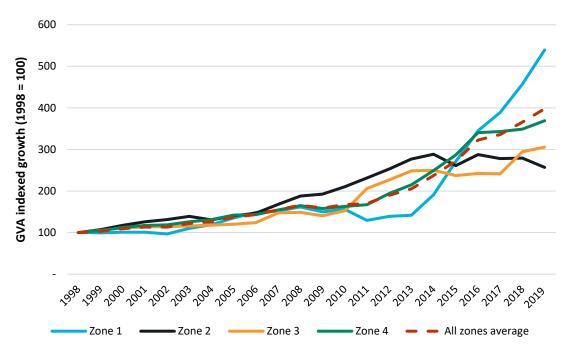
Source: Business Register and Employment Survey (BRES). Data series only consistent for all LSOA in scope from 2015 onwards.

GVA

- 7.55 Data from the ONS has been analysed to assess the change in gross value added in the study area. The data is disaggregated at an MSOA level, and some of it might be amalgamated for disclosure purposes.
- 7.56 In the study area, it has been found that, in 2019, GVA had grown by 4 times since 1998 across all four subzones, mainly driven by the OA in Zone 1.
- 7.57 Figure 7.12 shows that in Zone 1, GVA had grown by over 5 times since 1998, thanks to the increases in the levels of activity as shown in the previous section on employment, with employers offering high value jobs relocating to the King's Cross OA.



Figure 7.12: Growth in GVA across all Zones

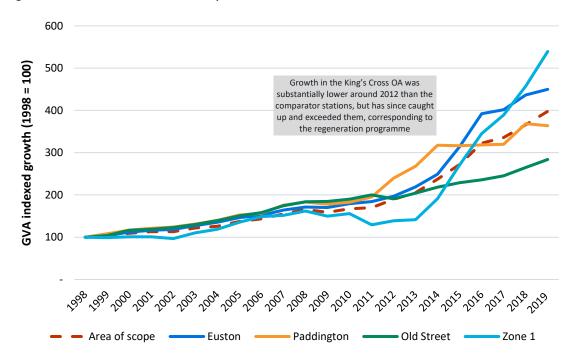


Source: Office of National Statistics (ONS)

Comparative analysis

7.58 A comparative analysis of GVA growth over time against the selected London rail termini has been undertaken. Figure 7.13 below presents the indexed growth in GVA for the King's Cross St Pancras study area compared with Euston, Paddington and Old Street.

Figure 7.13: Growth in GVA across all comparator rail stations



Source: Office of National Statistics (ONS)



- 7.59 The graph above shows that over the full period, growth in Zone 1, the OA, exceeded growth in all the other areas around the comparator stations. If growth in GVA within the King's Cross St Pancras whole study area is considered, this is comparable to the Paddington area, below the Euston area and above the Old Street area.
- 7.60 This demonstrates that, whilst it is clear that GVA in the OA has substantially grown in comparison with other areas and rail termini, the wider study area (i.e. beyond Zone 1) has not experienced the same rate of growth due to the concentration of economic activity in the OA.
- 7.61 It is also worth noting that until 2013, strong growth in GVA in Zone 1 cannot be observed. This could be attributed to a lag effect from the completion of Granary Square in 2012. The increase in growth also coincides with the timing of the completion of the King's Cross station redevelopment.

Impact on productivity

7.62 Figure 7.14 below presents that the GVA per worker, as a proxy for productivity, in Zone 1 has been consistently higher than in its surrounding areas, which have remained largely stable since 2009. This reflects the high-value businesses that have been attracted to the area, which generate a larger proportion of the GVA within the study area. The marked increase in GVA per worker in Zone 1 from 2014 onwards aligns with the parallel growth in office market floorspace.

120,000 100,000 80,000 60,000 40,000 20,000 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 Zone 1 ■ Zone 2 ■ Zone 3 ■ Zone 4

Figure 7.14: GVA per worker, 2009-2019

Source: Office of National Statistics (ONS) for GVA and BRES for number of jobs

- 7.63 Figure 7.15 below presents a comparison of productivity between the King's Cross St Pancras area and the comparator termini. It can be seen that the immediate OA (Zone 1) ranks highly in the comparison, with levels almost equivalent to the Euston area and higher than for Paddington and Old Street (with the wider King's Cross St Pancras area still ranking below these).
- 7.64 However, given that the areas where the stations are located have a different mix of sectors and companies (with different levels of inherent productivity), the comparison of levels of productivity (proxied by GVA per worker) should be treated with caution.



120,000

100,000

80,000

60,000

40,000

20,000

Area of scope Zone 1 Euston Paddington Old Street

Figure 7.15: GVA per worker, 2019, across London termini

Source: Office of National Statistics (ONS) for GVA and BRES for number of jobs. It should be noted that the Euston area of consideration overlaps with the King's Cross wider spill over area as defined earlier in the report.

Displacement

- 7.65 In addition to the analysis of the change in the metrics analysed above in this section, it is important to consider if these resulted in displaced activity from elsewhere or if the impact was net additional at a national and/or local level.
- 7.66 We therefore focus our assessment on likely displacement effects associated with the development of King's Cross and St Pancras and the activity it supported, accounting for the fact that the intervention might have displaced, in particular, the delivery of housing or the creation of jobs elsewhere.

Assessment of Likely Displacement Effects

Housing

- 7.67 The London housing market is highly constrained and characterised by a long-term under-supply of housing compared to housing demand, with the consequence that housing in the capital is among the least affordable in the country (measured as a multiple of incomes to house prices), despite incomes being in London significantly higher than the national average.
- 7.68 The related issues of under-supply and unaffordability underpin the 'Opportunity Area' policy to deliver large-scale housing development in brownfield locations and the affordable housing targets for new development (including those in OAs).
- 7.69 The supply-side constraints and market failures in the housing market mean that the level of displacement of housing in the Kings Cross St Pancras area is likely to be low, and that the housing delivered would be net additional at the London and national level.
- 7.70 However, the role of station investment in terms of delivering this additionality is also likely to be modest, compared to the impact of the regeneration of the King's Cross St Pancras area. While rail/station investment has had a material impact on perception of the area (see Chapter



3) and attractiveness of housing to occupiers, the strong central/inner housing market and developer response would have been likely to deliver additional housing even in the absence of station investment.

Employment and GVA

- 7.71 King's Cross St Pancras has developed into an area which is considered one of London's key Central London commercial property markets (see expert narrative earlier in this Chapter about the commercial property market). The King's Cross St Pancras development offers a unique combination of attributes large-scale land availability, proximity to central London, international rail connections and very high public transport accessibility not offered by other London locations. This has attracted employers in growing industries, for instance, Regeneris Consulting note that at the time their report was written in 2017, knowledge-based employment had grown by 65% since 2009 in the area, three times higher than across London.⁷⁰
- 7.72 Added to this, the redevelopment of stations at St Pancras and King's Cross has helped transform the perception of the area and London & Continental Railways (LCR) has created sense of place through its cultural (see paragraph 3.56), education, retail and entertainment offer and quality of overall public realm that also differentiates the area from comparators and has generated substantial benefits for the economy, developers, residents, and visitors.
- 7.73 These factors have combined to create a location that has attracted occupiers such as Google, Facebook and many other leading-edge firms to the area. These and many other firms are internationally mobile, and the decision to invest and expand in London was weighed against the merits of other locations in Europe (e.g., Paris, Berlin, Amsterdam⁷¹) and world-wide. This plays a role in the assessment of displacement. As the King's Cross St Pancras development is competing against international locations for inward investment in technology, it could be expected that the displacement at a national level may have been low, especially for the large technology firms relocating to this area.
- 7.74 The sector and occupier mix in King's Cross St Pancras underpins the strong comparative performance of the area in terms of 'output' metrics such as rental values (a measure of attractiveness to occupiers) and outcomes, notably the level of GVA and GVA per capita that exceed those of comparator areas.
- 7.75 Specifically, King's Cross St Pancras is identified as being part of London's Tech Belt and provides the ability for larger global tech companies to develop new offices meeting their bespoke requirements that could not be accommodated elsewhere in the Tech Belt.
- 7.76 Therefore, for the residual employment and GVA that is not in competition with international locations as described above, this is expected to have been displaced from other parts of London. King's Cross St Pancras is a key component of the success of the Tech cluster and supports the development of the cluster as a whole. In addition to the direct employment and GVA this brings, this also supports agglomeration benefits, whereby clusters exhibiting a higher level and density of employment are characterised by higher productivity levels (GVA per worker) for the sector as a whole.

⁷¹ London is Europe's top Tech City. But few things last forever. Oxford Economics (November 2020)



⁷⁰ The Economic and Social Story of King's Cross, Regeneris Consulting (November 2017)

7.77 It is not possible to attribute the employment and GVA additionality separately between the key drivers. The King's Cross development is likely to have been a major factor, in that it provided the scale and quality of development that attracted key occupiers. However, the redevelopment of St Pancras and later King's Cross stations were likely instrumental in helping change overall perceptions of the area and therefore enabling and supporting the nature of the redevelopment of the King's Cross OA.

Population

- 7.78 The well-connected area of King's Cross St Pancras, whose potential has been realised through investments in regeneration and station redevelopments, has attracted wealthier individuals and businesses to locate there. Real estate investment as part of regeneration contributes to increased land value.
- 7.79 A substantial proportion of people previously living there are therefore anticipated to have been displaced because they no longer could afford the cost of living in the area. Rising value of property prices generally increase the value of neighbouring areas, making renting unaffordable, which is anticipated to have led to residents moving out from the wider King's Cross St Pancras area. Businesses serving the local community could also have been led to move out of the area due to high commercial rents. Areas with a strong transport network often have greater proportions of renters, who have a higher chance of being displaced than owners.
- 7.80 Padeiro, Louro and da Costa (2019) state that there is existing evidence supporting the theory of TOD-induced gentrification, although this may be subject to methodological limitations. Nevertheless, it is suggested that "proximity to transit may indeed contribute to gentrification"⁷⁴. Furthermore, a report published by Runnymede found that based on quantitative analysis of their case study areas, "neighbourhoods located within 'Opportunity Areas' were significantly more likely to gentrify and had higher rates of displacement"⁷⁵. Therefore, the King's Cross OA is likely to have experienced displacement relatively more than other neighbourhoods in London.

Other effects

- 7.81 There are other effects in relation to additionality that have not been explored as part of the scope of this study. These include substitution, leakage and multiplier effects; these are described below from a theoretical point of view as a reference.
- 7.82 **Substitution** accounts for the circumstance where a firm substitutes one activity for a similar one. This is unlikely to have been caused by redevelopment of both stations, as the intervention would not have affected the business model of employers.

⁷⁵ <u>Pushed to the Margins, A Quantitative Analysis of Gentrification in London in the 2010s, Adam</u> Almeida (June 2021)



⁷² "King's cross railway lands: A "good argument" for change?" Dave Brenner (2014), DPU Working Paper No. 171

⁷³ <u>Deka, D. (2017). Benchmarking gentrification near commuter rail stations in New Jersey. Urban</u> Studies, 54(13), 2955–2972 as cited in Padeiro, Louro and da Costa (2019)

⁷⁴ <u>Transit-oriented development and gentrification: a systematic review, Transport Reviews, 39:6, 733-754 Miguel Padeiro, Ana Louro & Nuno Marques da Costa (2019)</u>

- 7.83 **Leakage** relates to impacts of the intervention on groups or areas outside the intervention scope area. It is possible that the scheme could have had some knock-on impacts beyond the immediate and spill over areas, as defined in this report. For instance, the creation of a biotech cluster around the OA might have improved the connectivity with a similar sector in Cambridge, given the good transport connections between both places. However, these impacts are expected to be catalytic and synergic and not negatively impact other areas outside the King's Cross St Pancras area, so again leakage is expected to be low.
- 7.84 As previously mentioned in Chapter 2, it is important to note the possible implications of Euston's proximity to the King's Cross St Pancras study area and the associated leakage implications, which have not been analysed in this study.
- 7.85 The intervention could potentially have resulted in some **multiplier effects** linked to the labour and construction sectors linked to the redevelopment of the station and linked to the generation of highly skilled jobs in the area and the income expenditure associated with these. The scale of these is difficult to ascertain based on the information available.

Evidencing the transmission mechanisms postulated on the Theory of Change

7.86 Having presented the data analysis, here we review to what extent the station investments have contributed to the impacts as postulated in the Theory of Change.

Strategic drivers

- 7.87 The key rail investment decisions that impacted the need for investment at the stations are:
 - The choice of developing the HS1 infrastructure through North Kent, among others to serve the deprived areas of Kent, with the natural outcome that a terminal station in the north of London was selected.
 - Following this, the arrival of international high-speed services to St Pancras, followed by domestic high-speed services from Kent.
 - The north-south capacity requirement through London to be delivered by Thameslink and the requirement for a connection with high-speed services to St Pancras.
 - The programme of investment to increase capacity at LU which resulted in King's Cross St Pancras being one of the best-connected transport hubs in London.

Discussions with stakeholders involved at the scheme development stage showed that the need for rail investment was unavoidable; rail demand was growing rapidly at the time and existing capacity for additional services and for space within current services would have been exceeded in the absence of any intervention.

It was these rail drivers which led to the station design choices. While there was some discretion in certain architectural design choices, these were not substantial and did not significantly affect the functionality of the stations.

7.88 In parallel to this, the King's Cross OA brought the opportunity to address existing issues in the area around the station by promoting a redevelopment that contributed to regenerating the entire area. This was undertaken via the spatial planning framework for the area with a focus on enabling growth arising from the rail investment.



- 7.89 The stations would therefore act as a gateway between the investment taking place on the railway and the wider regeneration of the area around them, with the perceived quality of the station being an impacting factor in the realisation of the rail-led benefits and the regeneration potential.
- 7.90 However, as described by the stakeholders interviewed, the existing stations had a surrounding built environment, public realm and inner layout which constrained economic activity at and around them. Therefore, investment at the stations was necessary to realise the benefits of the wider redevelopment taking place around them i.e., the stations needed to be attractive enough to generate an improved perception for passengers and visitors of the area which would in turn make the overall area more attractive for businesses, visitors and residents. The data on station usage in Chapter 6 and subsequent analysis of retail market performance illustrates how the use of the stations increased over time as the redevelopment and regeneration programme progressed and provides evidence of the causal linkages between this and the economic and social impacts observed in the area.
- 7.91 It is challenging to attribute some benefits solely to station investment itself, as it likely acted as an enabler of the economic impacts initiated by broader interventions. This means that the impacts cannot be attributed to a single driver (transport intervention, regeneration or station redevelopment), but rather that the bundle of interventions has contributed to the overarching transformation that can be seen today.
- 7.92 It can therefore be seen from the data presented in Chapters 5 (transport benefits), 6 (retail impacts) and 7 (property, employment and GVA impacts) that the investment that followed these drivers (regeneration, development), led to changes in demand, retail quality and prices, employment type and quantum, GVA and productivity, as well as a change in perception of the area. This informs the causal links postulated in the Theory of Change.

Outcomes and impacts

- 7.93 In the case of King's Cross and St Pancras, the availability of brownfield land which could be redeveloped and a supportive spatial planning regime was key to trigger the transmission mechanisms which led to the economic impacts observed in the data presented earlier in Chapter 7. This spatial planning regime was developed to address the issues related to the housing shortage in London, and in part contributed to the economic prosperity of London in the recovery phase from the financial crisis. A combination of the prime location with the potential to develop high quality commercial and residential floorspace attracted high profile occupiers such as Google and Facebook, as described in the expert market narrative and the displacement sections earlier in this Chapter.
- 7.94 This further reinforced the attractiveness cycle of the area and created the image and perception of a technology cluster (see market narrative about the Tech Belt earlier in the report), that competed with other areas, such as Canary Wharf, the City of London and the West End for highly skilled employment in the technology sector.
- 7.95 There was a collaborative approach amongst various stakeholders: the DfT; local authorities; local communities; and the King's Cross Central Limited Partnership (KCCLP). The landowners shared a vision, and all stakeholders had a long-term commitment to delivering a regeneration contribution. Camden Council, in exchange for granting planning permission, accepted cash and in-kind contributions for the provision of local infrastructure and community facilities, which



ensured land value uplift through jobs and housing outcomes and public realm improvements was captured.⁷⁶

- 7.96 Housing supply issues in London, identified in The London Plan, were addressed through delivery of housing and affordable housing. Since the initial projection in 2004, more than 1,900 new homes have been completed up to 2020-21⁷⁷. The London Plan 2004 set a London-wide affordable housing target of 50%, which has since been reduced to 35%⁷⁸. The average percentage of affordable homes in London is 27% and the percentage for King's Cross OA is 38%⁷⁹.
- 7.97 In addition, as raised by stakeholders, two additional features of the regeneration of the area contributed to its character:

The location of Central Saint Martins' University of Arts, which constituted an anchor for the wider redevelopment around the stations and contributed to the feel and identity of the area as a young, vibrant, international part of the city.

The Knowledge Quarter, which is a knowledge skills cluster situated around King's Cross, Euston Road and Bloomsbury, including the British Library, the Francis Crick Institute, the Guardian headquarters, the Alan Turing Institute and a number of companies and organisations in the research, biotech and medical industries, gives the wider area a distinct feel from other parts of London, according to stakeholders. While this was not a premeditated choice (as the area evolved organically), the initial organisations located in the area acted as an anchor to attract similar organisations within the industry, developing the cluster.

- 7.98 All of these factors contribute to achieving the impacts of the scheme, either directly through the benefits they delivered or supported(e.g., making accessibility, connectivity and permeability better) or through the perceived attractiveness of the area (e.g., improving the perception of the area by employers, developers, workers and London residents and visitors).
- 7.99 The data analysed, as well as the market narrative presented, informs the transmission mechanisms that were postulated in Chapter 4. Increases in employment, GVA and productivity, nature and quantum of retail, etc. are can be observed following major milestones in the regeneration and redevelopment process (see annotations in data graphs).
- 7.100 Whilst establishing the exact causality mechanisms is very complex due to the dynamic urban environment in which the redevelopment took place, the narrative and data analysis support the assumed causal mechanisms and validate the assumptions that were postulated in the Theory of Change.

⁷⁹ Kings Cross Opportunity Area | London City Hall



⁷⁶ Railway Reform: Toolkit for Improving Rail Sector Performance Case Study: London King's Cross, The World Bank

⁷⁷ Kings Cross Opportunity Area | London City Hall

⁷⁸ Pushed to the Margins, A Quantitative Analysis of Gentrification in London in the 2010s, Adam Almeida (June 2021)



8 Conclusions

8.1 This chapter presents the key conclusions derived from the analysis of economic impacts linked to the redevelopment of King's Cross and St Pancras stations, and the programme of regeneration around them.

Context for the stations' redevelopments and Theory of Change

- The context in which King's Cross and St Pancras stations were redeveloped was very complex and fluid. Three key strategic drivers of change were interlinked:
 - Substantial changes to the rail connectivity and accessibility from and to the King's Cross and St Pancras transport hub, including international and domestic high-speed services on HS1, changes to Thameslink and enhancements to LU;
 - Availability of brownfield land for redevelopment in a premium central London location,
 in a context of land scarcity close to well-connected transport hubs; and
 - A necessity to invest at King's Cross and St Pancras stations to accommodate future rail growth and a deliberate choice to do this in a manner that improved the vibrancy of the newly developed area.
- Due to the closely interlinked nature of these drivers, it is not possible to attribute the
 observed impacts specifically to each of them; however, the causal relationships between
 these and the impacts have been first postulated through the Theory and Change and logic
 mapping that frames this case study and then tested by the development of a market
 narrative and by the data analysis undertaken.
- The analysis undertaken for this study suggests that a virtuous circle was established between the different drivers and the observed economic impacts. While improvements to rail connectivity were likely to have been the initiator of change, synergies and catalytic relationships were established between the different drivers:
 - Improved rail connectivity attracted employers to that location, who could then attract employees from an expanded labour market pool;
 - The relocation of these employers, mainly related to the technology and biotech sectors, coupled with the decision to locate the University of Arts at King's Cross, provided a different focus and identity to the area and contributed to the change in perception and enhanced commercial attractiveness of the area described by stakeholders; and
 - This contributed to the place-making function of the area, which was supported by the high-quality architectural design of the stations and public realm.

Assessment of impacts

 Redevelopment of King's Cross and St Pancras contributed to the generation of social and economic impacts in the area of influence of the intervention. These impacts included the



quantum and characteristics of the retail offer at and around the stations, improvements in the property market (offices, residential and developments), and the employment market, levels of economic activity and productivity and. The investment has also had negative impacts, such as gentrification of the area that might have led to displacement of former residents and businesses.

- Three main transmission mechanisms between the investment and its impacts have been identified:
 - Increased attractiveness to employers, which have more, better connected and higher quality premises to establish themselves and which can draw from a larger labour market, supply chain and customer base as appropriate;
 - Increased attractiveness to workers, visitors and residents, who can access the area quicker and more conveniently and also see it as a destination in its own right; and
 - Increased attractiveness to developers and landowners, who can benefit from higher value properties and a more economically successful area.
- Resulting from these mechanisms, the main observed impacts are as follows:
 - Office market: in the OA, office floorspace has increased by over 3.5 times and its value per square metre has increased by over 2.5 times between 2010 and 2019. Growth has been substantially higher than in benchmarked locations, including in changes in stock (138% growth between 2011 and 2021, compared to less than 30% for all other locations), changes in rent prices (124% growth, followed by Old Street and Euston) and demonstrating low and stable, vacancy rates (around 3%, compared to around 5% in Paddington, 8% in Old Street and 7% in the Tech Belt and Central London).

This reflects the increased willingness of occupiers to move to the King's Cross St Pancras area due to its status as a very well-connected location that delivers high quality space and environment with a range of amenities that attract talent. In part, this increase in office floorspace was enabled by the availability of brownfield land for redevelopment in a premium location .

- Residential market: growth in residential property values has been the highest at King's Cross St Pancras among the comparator areas specifically, 125% growth in property values between 2011 and 2021, a higher level of growth than Paddington (c. 55%), Old Street (c. 60%) and Euston (c. 90%). This is also the case for the values per square metre, with growth at King's Cross being 112% in the same period, compared with c. 35%, 40% and 55% at Paddington, Euston and Old Street respectively. This shows that both the property supply and its prices have increased over this period above comparator areas.
 - In 2021, King's Cross St Pancras had higher per sqm property values than the comparators, demonstrating that it has become a strengthened market.
- **Developments**: the outline development consent in 2006 led to a substantial increase in the available mixed-use commercial floorspace versus the comparator



stations⁸⁰. In addition to this, the creation of a self-sustaining commercial development environment led to an increase in the number of consents for commercial floorspace, which benefitted from the investment taking place at King's Cross St Pancras, more than comparator areas.

- Employment: growth in the number of jobs in the OA between 2009 and 2019 has been substantial, with the creation of around 19,000 new jobs in the OA and the number of jobs trebling from around 8,700 to 27,700 jobs. These jobs mainly corresponded to the information and communication, professional, scientific and technical sectors and to some extent the accommodation and food services sector. This demonstrates the highly skilled pool of employers and employees that have been attracted to the area thanks to investment at and around King's Cross St Pancras. Growth in employment has been substantially higher in comparison with the comparator areas.
- GVA and GVA per worker: growth in economic output has also been higher around King's Cross than in the comparator areas, with GVA growing over 300% between 2011 and 2019 in the OA, compared with around 145%, 85% and 40% growth in Euston, Paddington and Old Street respectively (noting that these are wider areas beyond the immediate vicinity of the station). GVA per worker in the King's Cross St Pancras area, used as a measure of productivity, caught up, and in some cases significantly exceeded comparator stations, demonstrating the highly skilled employees attracted to the area.
- Overall, it is anticipated that the employment and GVA impacts linked to leading-edge technology firms with an international footprint may have caused limited displacement from other UK or London locations, given that they tend to consider their location decisions at an international level. This reflects the lack of land availability in premium locations close to highly connected transport hubs, as well as the profile and industries of employers in the King's Cross and St Pancras area (which choose where to locate among a range of international locations) that would have not located elsewhere in London or the UK. In contrast, for other firms that would not have located outside the UK, their decision to locate premises in the King's Cross St Pancras area would likely have led to displacement from other parts of London or the UK.
- However, the transformation of the King's Cross and St Pancras area is anticipated to have led to an increase in gentrification and therefore potentially the displacement of some existing local residents and businesses.

Findings of the study

8.2 The assessment of impacts was used to evidence the Theory of Change that was postulated on the basis of the stakeholder interviews and the documentation review. This showed that the improvements in accessibility, connectivity and more widely the attractiveness of the area were part of a virtuous circle, whereby each of the enhancements acted as a catalyst to increase the

⁸⁰ Whilst consent of most developments took place in 2006, its delivery was phased throughout a number of years.



attractiveness of the hub for residents, visitors and businesses. However, as part of this study, it was not possible to isolate the impact of each of the individual drivers for change.

- 8.3 As such, an improved rail connectivity attracted employers to the area, who could attract employees from an expanded labour market pool, supply chain and customer base. In addition, investment made the area more attractive for developers, who benefited from higher value properties and a more economically functional area, as well workers, visitors and residents, for whom the area has become more accessible and attractive.
- The relocation of employers mainly related to the technology and biotech sectors, coupled with the decision to locate the University of Arts at King's Cross, provided a different focus and identity to the area and contributed to the change in perception that the area has gone through. This contributed to the place-making function of the area and its conversion to a destination in its own right, both for residents but also for visitors, which was supported by the design of the stations and public realm.
- 8.5 It has been shown that the combination of additional connectivity, land redevelopment and investment at the stations may have had a substantial impact in transforming the area into a premium location in London for employers, developers, and visitors. As stated above, this nonetheless led to gentrification of the area with the associated displacement of previously local residents and businesses.
- This study shows that growth was higher than in a number of comparator locations and stations. This is likely to reflect the catalytic effects of the combined three strategic drivers above, given that the other benchmarks did not have all the success factors identified for King's Cross St Pancras (e.g., not as substantial connectivity improvements, less land available, etc.).



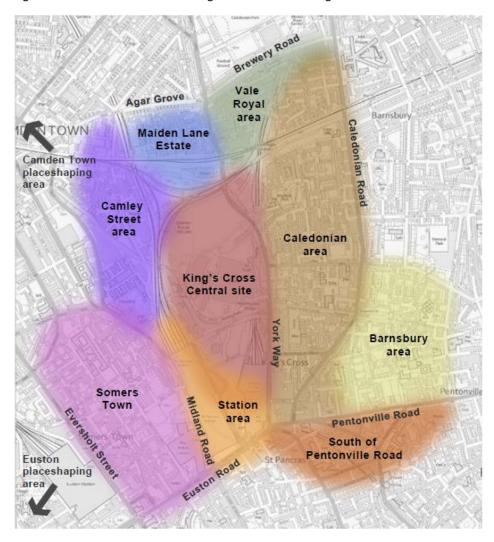


Appendices



A Place plan of London boroughs

Figure A.1: Place Plan of London Boroughs of Camden and Islington



Source: King's Cross: Shaping the Future

B Additional detail underpinning the context and rationale of the interventions

International and domestic high-speed services to St Pancras

- B.1 HS1 (previously the Channel Tunnel Rail Link, or CTRL) is a high-speed line which connects the Channel Tunnel with London, via Stratford, Ebbsfleet and Ashford in Kent. The line was built in two sections: section 1 between the Channel Tunnel and Fawkham Junction which opened in September 2003, and section 2 between Southfleet Junction and St Pancras which opened in November 2007. Eurostar services began serving St Pancras on opening⁸¹, while domestic high-speed services between St Pancras and Kent were introduced in December 2009.
- B.2 Based on objectives stated by various stakeholders and identified by a UCL project profile of the Channel Tunnel Rail Link (CTRL, later HS1)⁸², we have identified three key rail-related drivers behind the decision to build HS1: increase capacity, reduce journey times, and stimulate urban regeneration.
- B.3 HS1 was initially planned to tunnel through south-east London to an underground King's Cross international station. However, in 1994 this plan was rejected, and the decision was taken to approach London from the east, terminating at St Pancras. There were several potential drivers behind this decision, informed by documentation review and stakeholder interviews:
 - Plans were proposed to develop an East Thames corridor of regeneration through London.
 This led to a new appreciation for urban renewal in government, with east London and the King's Cross area being suitable candidates.
 - Regeneration was set out as an important driver to the overall case for HS1. The Government received a 50% share of the surplus value created by new developments⁸³.
 - King's Cross and St Pancras had plenty of railway land available for development and offered potential connections to the North and Midlands.
 - St Pancras station was seen as not realising its full potential at the time.
 - The original route involved expensive tunnelling under listed buildings, a medieval hospital
 and the King's Cross gasworks, while the route into St Pancras could be routed near the
 existing North London Line.

⁸³ The regeneration benefits of the CTRL, DfT (2009)



⁸¹ Prior to opening of the high-speed line Eurostar services operated from Waterloo International.

⁸² <u>Channel Tunnel Rail Link Case Study, Project Profile, UCL OMEGA Centre for Mega Projects in Transport and Development (August 2008)</u>

- B.4 As a result of the decision to locate HS1 at St Pancras, the station was extended to hold extra platforms and extend existing platforms to the required length for Eurostar. On completion there were 13 platforms: 4 for Midland Main Line services on the western side, 6 for international services in the central train shed, and 3 for HS1 domestic services to Kent on the eastern side⁸⁴. On opening, HS1 could carry up to 8 Eurostar services per hour as well as up to 8 domestic high-speed services per hour, along with two open access paths⁸⁵.
- B.5 Once St Pancras opened to international services in 2007, Eurostar moved their operations to St Pancras and stopped serving Waterloo. This decision was taken in order to free up domestic train routes into Waterloo, improve connections between Eurostar and the Midlands/North, and reduce Eurostar's operating costs (as operating from two London termini would be too expensive to be sustainable).
- B.6 Domestic HS1 services launched in 2009 using new Class 395 'Javelin' trains, as part of a major revision of the Southeastern timetable in December 2009.

Thameslink & King's Cross St Pancras Underground station

- B.7 As a result of the work to bring HS1 to St Pancras and the increased services this would bring to the area, the King's Cross Thameslink station and King's Cross St Pancras underground station needed to be expanded to handle the additional passenger traffic.
- B.8 The decision to relocate the King's Cross Thameslink station to St Pancras was originally intended to accommodate the Thameslink Programme (originally called Thameslink 2000), which would introduce additional and longer trains connecting North and South London through the Snow Hill tunnel. The original King's Cross Thameslink station was located within a very constrained site that could not accommodate 12 car trains, with poor interchange to the mainline and Underground stations requiring passengers to use long underground passageways. There were also safety issues at the station with narrow platforms, a lack of fire escape routes and a poor passenger environment. The station with narrow platforms and a poor passenger environment.
- B.9 The initial proposals to expand the Thameslink network were made in the early 1990s, and so provisions were made in the Channel Tunnel Rail Link Act 1996 for a new Thameslink station to be constructed at St Pancras while work to accommodate HS1 was undertaken.⁸⁸ This meant that by the time the new Thameslink station was constructed, it was driven by three purposes: to accommodate the expanded Thameslink network, to improve safety and passenger experience at the station, and to serve the new Eurostar/HS1 terminal at St Pancras.⁸⁹ The new

⁸⁹ Thameslink 2000, RailStaff (2006)



⁸⁴ King's Cross & St Pancras Upgrade, alwaystouchout.com (2007)

⁸⁵ <u>Channel Tunnel Rail Link Case Study, Project Profile, UCL OMEGA Centre for Mega Projects in Transport and Development (August 2008)</u>

⁸⁶ Thameslink 2000, RailStaff (2006)

⁸⁷ Thameslink 2000 Closures Statement of Reasons, Network Rail and Thameslink (October 2005)

⁸⁸ Thameslink 2000 Closures Statement of Reasons, Network Rail and Thameslink (October 2005)

St Pancras Thameslink station opened in December 2007, separately from and in advance of the wider Thameslink Programme. 90

- B.10 Regarding the Underground station, a key recommendation of the Fennell report following the 1987 King's Cross Fire⁹¹ was taking action to improve passenger flow, ease congestion and increase safety at the King's Cross St Pancras Underground station. In response, the London Underground (King's Cross) Act was passed in 1993, stating that improvements were authorised at King's Cross St Pancras "in order to improve safety and to relieve passenger congestion". ⁹² Two new ticket halls were constructed: the western ticket hall and northern ticket hall.
- B.11 The Western ticket hall was opened in 2006, doubling the station capacity at the time to serve HS1, Thameslink and visitors to the 2012 Olympics. The Northern ticket hall opened in 2009, further doubling station capacity and reducing congestion. It also allowed step-free access to the Underground platforms and was described as essential to effectively managing future passenger numbers. This ticket hall also connects directly to the HS1 domestic station via a direct subway link. The statement of the station via a direct subway link.
- B.12 Overall, we have identified the following key drivers behind the decisions to redevelop the Thameslink and Underground stations:
 - Improve passenger safety and experience by expanding capacity, particularly as a response to the 1987 fire;
 - Better serve and accommodate additional passengers due to HS1/Eurostar;
 - In the case of Thameslink, accommodate the longer and more frequent services to be introduced by the Thameslink Programme; and
 - After the Olympics were won in 2005, improve capacity to accommodate visitors to the 2012 Olympics.

King's Cross mainline station redevelopment (2008-2012)

- B.13 As the improvements at King's Cross St Pancras underground station were nearing completion, work began on the King's Cross Redevelopment Programme in 2008. This project focused on constructing a new concourse at King's Cross, four times the size of the previous concourse (expanded from 2000m³ to 8000m³), in order to accommodate more passengers and improve the public realm at the station.
- B.14 Improvements included constructing a dome over the top of the subsurface LU ticket halls, reconstructing platforms 1 and 8, shortening platforms 5-8 to enlarge the concourse, a new footbridge and escalators, a new 12-car platform 0, new office space, a renewed train shed roof

⁹⁵ King's Cross & St Pancras Upgrade, alwaystouchout.com (2007)



⁹⁰ <u>Thameslink passengers to get new station at St Pancras, DfT via Government News Distribution</u>
<u>Services (2006)</u>

⁹¹ Investigation into the King's Cross Underground Fire, DfT (October 1988)

⁹² London Underground (King's Cross) Act 1993

⁹³ Mayor and Transport Secretary open Kings Cross St Pancras Western Ticket Hall, Greater London Authority (2006).

⁹⁴ King's Cross St. Pancras Tube station doubles in size as state-of-the-art ticket hall opens, TfL (2009)

and solar panels. 96 The new concourse uses the northern LU ticket hall as its support structure 97 meaning that the improvements to the Underground station were a prerequisite to building the concourse.

B.15 The project took place from 2008-2012, opening in time for the London Olympics. Planning for the redevelopment was already underway when London won the Olympics in 2005. After this, the original timescales for the redevelopment were redrawn to ensure the new concourse would be ready in time for the Olympics in 2012. The final phase of the redevelopment, which took place in 2013, saw the existing 70s green canopy to the front of the station removed to create a new public square.98

Rail developments post-HS1

- **B.16** The main rail development affecting the King's Cross St Pancras area is the East Coast Upgrade, which began in 2019 and is ongoing. The upgrade includes the following stages:⁹⁹
 - 2014 onwards: The power supply was upgraded allowing faster electric trains to run. Phase 1 (London to Doncaster) began in 2014 and was completed in 2020. Phase (Doncaster to Edinburgh) started in 2020;
 - January 2019: Work began at Stevenage to construct a new turnback platform and 2km of new track for suburban services. Work was completed in August 2020, enabling more services to run by removing terminating trains from the main line;
 - March 2019: Work began at Werrington to prepare the Grade Separation tunnel site. The tunnel was opened in December 2021, diverting slow freight trains under the ECML. This frees up space for long distance services;



Figure B.1: East Coast Main Line route map

August 2019: The Newark flat crossing was replaced; and

December 2020: The 'King's Uncrossed' blockade allowed engineers to replace all four railway tracks into King's Cross over Christmas. The work in King's Cross was completed in June 2021.

⁹⁹ The East Coast Upgrade, 2022: Timeline



⁹⁶ King's Cross Station Redevelopment Programme, Network Rail Consulting

⁹⁷ Construction of the King's Cross northern ticket hall, London, UK, Jim Worthington and Kenneth Awinda (2013)

⁹⁸ King's Cross Redevelopment, Network Rail (2012)

- B.17 The main aim of 'King's Uncrossed' was to modernise track, signalling and overhead equipment, improving reliability by making it easier for trains to arrive and leave. Track layouts were simplified and the Gasworks Tunnel was reopened to add two extra tracks, bringing the number of tracks up to six. Signalling was transferred to the Railway Operations Centre in York. The work was completed in June 2021 and could enable extra services to run, though the timetable has remained the same so far.¹⁰⁰
- B.18 Upgrades to the Midland Main Line into St Pancras were first proposed in 2012 as part of the High Level Output Specification for Control Period 5, to include electrification of the line between London and Sheffield. However, the project was paused in 2015 along with the rest of the HLOS plans in order to carry out a review. Work was restarted later in 2015, then cancelled again in 2017, and were finally re-announced in 2021 as part of the Integrated Rail Plan. 102

Rail and Tube service changes since 2000

B.19 Alongside the changes described above, there have been various changes to the rail and Tube services which call at King's Cross and St Pancras over the past two decades. These changes have been summarised in Table C.1 (in **Appendix C**), which covers National Rail services at the two mainline stations, and Table C.2 (in **Appendix C**) which covers Underground services at King's Cross St Pancras.

¹⁰² Integrated Rail Plan for the North and Midlands, DfT (2021)



¹⁰⁰ Network Rail, 2022: King's Cross Remodelling

¹⁰¹ High level output specification 2012: Railways Act 2005 statement, DfT (2012)

C Summary of changes to National Rail and London Underground services

Table C.1: National Rail service changes at King's Cross and St Pancras since 2000

Operator	2019 off-peak weekday service	Major changes
St Pancras		
Eurostar	24 trains per day (tpd) comprising: 15tpd London-Paris 9tpd London-Brussels (7tpd call at Lille, 3tpd extended to Amsterdam via Rotterdam) Additional seasonal services to Disneyland Paris, South of France and French Alps	 2007 - Eurostar services moved from Waterloo to St Pancras 2015 - Introduced direct London-Lyon/Avignon/Marseille service in summer season 2018 - 2tpd London-Amsterdam service introduced 2019 - Third daily service to Amsterdam introduced 2020 - Direct Amsterdam-London services introduced
Southeastern High Speed	4 trains per hour (tph) comprising: 1tph London-Dover 2tph London-Faversham 1tph London-Margate Limited peak service from London to Maidstone West	 2009 - Domestic HS1 services begin 2012 - Operated high speed 'Javelin' services between St Pancras and Stratford during London Olympics
East Midlands Railway (EMR)	5tph comprising: 2tph London-Nottingham 2tph London-Sheffield 1tph London-Corby	 2003 - 1tph St Pancras-Manchester 'Project Rio' service introduced while WCML underwent engineering work (ended 2004) 2007 - East Midlands Trains franchise created, merging Midland Mainline and Central Trains 2008 - 1tph introduced to Corby 2009 - 2tph introduced to Sheffield by extending 1tph London-Derby 2019 - Franchise awarded to EMR
Thameslink	16tph comprising: 4tph Sutton-St Alban's 4tph Brighton-Cambridge/Bedford 4tph Horsham-Bedford/Peterborough 2tph Rainham-Luton 2tph Orpington-Kentish Town	 2007 - Thameslink platforms open at St Pancras 2009 - 15tph peak hour service introduced on core section 2018 - A large timetable change in May reintroduced cross-London services via London Bridge and many new services 2019 - Cambridge-Brighton service doubled to 2tph in each direction
King's Cross		
London North Eastern Railway	5tph comprising: 2tph London-Edinburgh (1tph sometimes extended to Aberdeen/Inverness)	Early 2000s - Increased Leeds services from 37tpd to 53tpd as Class 373s were moved to GNER 2011 - 'Eureka' timetable change simplified stopping patterns and introduced 1tpd London-Lincoln



	2tph London-Leeds (1tph extended to Harrogate every other hour) 1tph London-Lincoln (extended to York every other hour)	 2015 - VTEC awarded franchise; introduced daily services to Stirling and Sunderland 2016 - Newcastle services extended to Edinburgh 2018 - Franchise awarded to London North Eastern Railway (LNER) 2019 - 'Azuma' trains enter service; expanded service to Lincoln and Harrogate by extending existing services every other hour
Great Northern/ Thameslink	4tph comprising: 2tph London-Ely/King's Lynn operated by Great Northern 2tph London-Cambridge operated by Thameslink	 2007 - King's Cross Thameslink station closes with through services moved to St Pancras 2018 - Great Northern route connected to Thameslink, resulting in several services moving to St Pancras and continuing through London
Grand Central	9tpd comprising: 5tpd London-Sunderland 4tpd London-Bradford Interchange	 2007 - Services begin with 1tpd London-Sunderland 2008 - Introduced a 3tpd service to Sunderland 2009 - Introduced a 4th daily service to Sunderland 2010 - Introduced 3tpd between London and Bradford 2012 - Added a 5th Sunderland service 2013 - Added a 4th Bradford service
Hull Trains	7tpd London-Hull, with 2tpd extended to Beverley	2000 - Services begin with 3tpd London-Hull 2002 - 4 th daily service to Hull 2004 - 5 th daily service to Hull 2005 - 6 th daily service to Hull 2006 - 7 th daily service to Hull 2015 - 1tpd extended to Beverley 2019 - 2 nd daily service extended to Beverley
Lumo	2tpd London-Edinburgh (2021 onwards)	2021 - Services commenced



Table C.2: London Underground service changes since 2000 (lines serving King's Cross St Pancras)

Line	Maximum service	Changes
Circle	6tph	2009 - Broke the 'circle' with extension to Hammersmith 2014 - New S Stock trains ¹⁰³
Hammersmith & City	15tph	2012 - New S Stock trains
Metropolitan	15tph	2010 - New S Stock trains
Northern (Bank branch)	26tph	2014 – Automatic Train Operation (ATO) introduced permitting up to 26tph (up from 20tph)
Piccadilly	24tph	2008 - Heathrow T5 extension opened 2016 - Night Tube begins (6tph)
Victoria	36tph	2009 - New rolling stock 2013 - New signalling permitting 33tph (up from 27tph) 2016 - Night Tube begins (6tph) 2017 - New timetable of 36tph

¹⁰³ S Stock trains are 'sub-surface' trains. They increased capacity, are more reliable and have faster acceleration than previous rolling stock.

D Detailed development analysis

- D.1 This section provides more detailed analysis about the quantum of development delivered at the King's Cross St Pancras area as well as for the other comparator rail termini which informs the findings presented in Chapter 7 of the report.
- D.2 As set out within the methodology section, in analysing development data, we have adopted slightly altered data areas. The incorporation of 500m radius' (6-8 minute walk) around station areas allows for a direct comparison of consents and floorspace between comparators.
- D.3 This approach is generally accepted as an appropriate area of influence, reflecting distance between station areas and places of work that people are prepared to walk. Moreover, given the close proximity of many of London's stations, limiting analysis to 500m zones of influence limits the ability of neighbouring stations to influence data outputs.

Number of consents

- D.4 This section considers the number of planning consents achieved within the defined areas. It is worth noting that this does not count delivery of schemes, and in some instances, consents may have lapsed.
- D.5 Notwithstanding the points made above on utilisation of 500m radius, this approach does present some limitations. In analysing the number of consents over time, the complexity of land ownership is likely to have an influence on trends.
- D.6 For example, the land ownership pattern at King's Cross St Pancras is fairly straightforward, with a small number of freehold owners across the 500m zone of analysis. Conversely, Old Street presents a complex ownership structure with a large number of freehold owners. We would therefore expect to see a greater number of planning consents coming forward in Old Street, though these consents may be for smaller developments. Paddington and Euston have ownership structures that sit in the middle of these examples and are therefore likely to present middling results.
- D.7 With these points in mind, the data presented in the graphs below should be read with caution. Placing these trends in the context of some of the later analysis considering scale and nature of schemes over time will help to build a more rounded understanding of the impact of King's Cross St Pancras upon development activity.
- D.8 Considering the graphs below, data indicates broadly similar trends across each of the station areas. It is interesting to note the proportion of commercial and mixed-use consents in King's Cross St Pancras, relative to the likes of Paddington which presents a far greater proportion of residential permissions. However, on a pure planning consent basis, the high proportion of commercial consents at King's Cross St Pancras is not out of kilter with Old Street and Euston.



Figure D.1: King's Cross 500m Balance of Consents 2000-2020

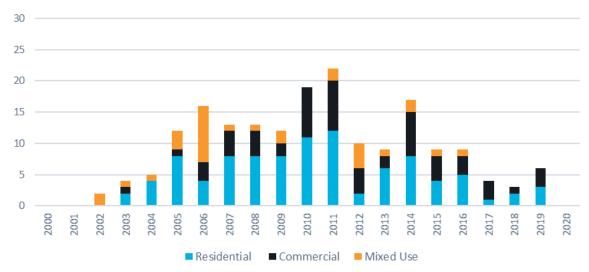
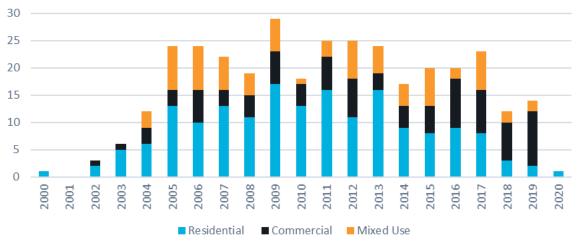
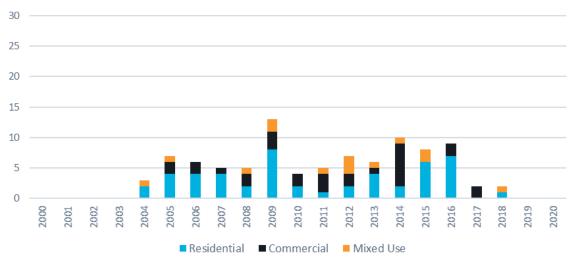


Figure D.2: Old Street 500m Balance of Consents 2000-2020



Source: London Development Database, 2022

Figure D.3: Euston 500m Balance of Consents 2000-2020





■ Commercial

Mixed Use

Figure D.4: Paddington 500m Balance of Consents 2000-2020

Source: London Development Database, 2022

D.9 When comparing areas around rail stations against some of the data for the wider market areas, the proportion of commercial and mixed-use consents is far less significant relative to residential consents for the latter. This reflects the heightened demand for commercial floorspace in areas in close proximity to transport infrastructure, in particular rail.

Residential

D.10 In this instance, we can reflect that King's Cross St Pancras has helped drive planning consents for commercial and mixed-use schemes. However, this is generally in line with comparators such as Old Street and Euston and reflects the impact that transport infrastructure has on the demand for commercial uses, relative to residential, although this effect is not necessarily particular to King's Cross St Pancras as it can also be observed near other major rail stations, such as Euston or Old Street.

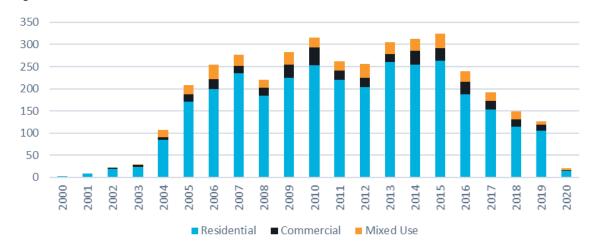


Figure D.5: Camden Balance of Consents 2000-2020

Figure D.6: CAZ Balance of Consents 2000-2020

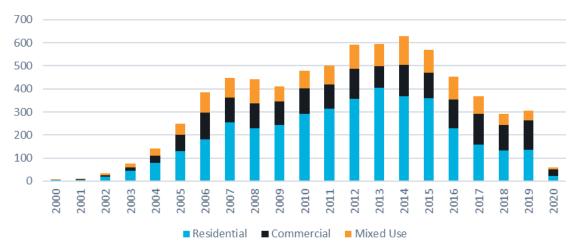
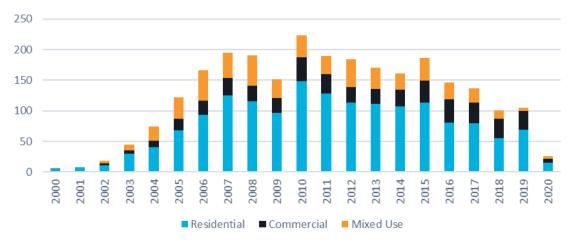


Figure D.7: Tech Belt Balance of Consents 2000-2020



Source: London Development Database, 2022

Figure D.8: Inner Boroughs Balance of Consents 2000-2020



Quantum of development

- D.11 This section considers the quantum of development coming forward, looking at residential units, non-residential floorspace, and non-residential floorspace within mixed use schemes.
- D.12 Considering residential units consented, the impact of the outline consent at King's Cross St Pancras in 2006 is clear. This consent was for 1,704 residential units, including 754 affordable homes.
- D.13 Whilst this displays as a significant uptick in activity, followed by a levelling off, we would note that there are no reserved matters applications in the dataset that consider additional residential units at King's Cross Central, beyond those detailed in the master consent. This means that phased delivery of the consented units would have led to a far steadier increase in residential units on the ground, perhaps more akin to the trends shown in Old Street and Euston.
- D.14 The steady increase in residential units since 2006 has been driven by 126 residential consents that fall outside the scope of the masterplan, providing permission for 828 residential units. The largest of these include consent for 68 flats at St Pancras Chambers in 2006, consent for 64 units at King's Cross House in 2006 and the 2014 consent of allocation SA4 within the Local Plan at 277a Stratstone, delivering 60 residential units.



Figure D.9: Residential Units Consented (cumulative)

- D.15 Building on some of the themes highlighted in the analysis of number of consents, the graphs below demonstrate the significant impact the King's Cross development has had on commercial floorspace consented.
- D.16 Purely commercial schemes have seen continued strong growth, over and above that seen at comparator areas from around the time of the master consent in 2006 through to 2020. Unlike residential units consented, a fairly large proportion of these have come through as reserved matters applications for the King's Cross Central masterplan. The largest example of this is the 86,000sqm consented for Google's HQ within King's Cross Central Zone A in 2013, which was renewed in 2017 after lapsing.



- D.17 Reserved matters consents for plots B1, B5, B6 and B3 within the masterplan between the years 2014 and 2018 led to a total of 126,600sqm of pure commercial floorspace.
- D.18 Notwithstanding this, the impact of the King's Cross masterplan has been felt beyond the scheme itself, with a total of 175,387sqm of non-residential floorspace consented between 2003 and 2019 with no direct relationship with the masterplan.
- D.19 The most significant examples of this include 84,000sqm consented in 2011 for a biomedical research centre including lab and research space at the Francis Crick Institute, and the 2015 consent for re-development of the Town Hall to a 17,277sqm hotel. There are a number of instances of mixed-commercial uses not directly related to the masterplan being developed reflecting between 5,000-10,000sqm of floorspace.



Figure D.10: Commercial and Research (Non-Residential) Floorspace Consented (sqm, cumulative)

- D.20 Much like the residential units consented, mixed-use schemes present a sharp uptick in activity, followed by a levelling off. This reflects the impact of the outline consent in 2006, which provided for 647,356sqm of non-residential floorspace, with no additional floorspace in reserved matters applications thereafter. Again, we would note that phased delivery has created a far steadier growth in mixed-use non-residential floorspace on the ground.
- D.21 Mixed-use consents not directly related to the masterplan have had a fairly insignificant impact over the period considered. Between 2002 and 2014, there were 27 consents providing 42,594sqm of non-residential floorspace in mixed use schemes.
- D.22 The largest of these was the 2009 consent of 10,523sqm of commercial floorspace at the former Elizabeth Garrett Anderson Hospital.
- D.23 Analysing the data at King's Cross St Pancras relative to comparator areas, the rate of growth following the masterplan outline consent in 2006 has been slower. Given that purely commercial floorspace has seen strong levels of planning activity not directly related to the masterplan, minimal activity in residential and mixed-use schemes likely reflects a saturated residential market following the outline consent and phased delivery of the King's Cross Central masterplan.



Figure D.11: Mixed Use Floorspace (excluding Residential) Consented (sqm)

Residential floorspace vs. Non-residential floorspace

- D.24 This section analyses the proportion of residential floorspace to non-residential floorspace to understand the impact of King's Cross St Pancras on the mix of uses consented.
- D.25 As the London Development Database does not provide a floorspace figure for residential consents, we have made a high-level assumption that a residential unit equates to 70sqm. This has been based on sizes detailed in the Technical Housing standards Nationally Described Space Standards (Department for Communities and Local Government, 2015), and an appropriate assumption on mix of unit sizes.
- D.26 As has been suggested through analysis of number of consents and quantum of floorspace/residential units consented, King's Cross St Pancras has demonstrated a high proportion of commercial floorspace relative to residential. This trend is clear when viewed in the context of comparator areas such as Old Street, Euston and Paddington which have indicated higher proportions of residential space. The combination of the King's Cross Central masterplan in 2006, and purely commercial consents that are not directly related to the masterplan in the period thereafter are the key factors driving this trend.
- D.27 Notwithstanding this, the data must be read with the understanding that residential floorspace has been underrepresented from 2006 onwards with all King's Cross Central masterplan units accounted for through the outline consent in 2006, despite a phased delivery approach being adopted in the period thereafter.
- D.28 Even taking account of this point, the data indicates a strong commercial focus in King's Cross St Pancras. Whilst it is challenging to quantify the causal link between rail infrastructure investment and commercial property development, it is likely that that investment at King's Cross St Pancras was a strong driver of this trend.



Figure D.12: Residential Floorspace as a % of Total Floorspace, King's Cross 500m

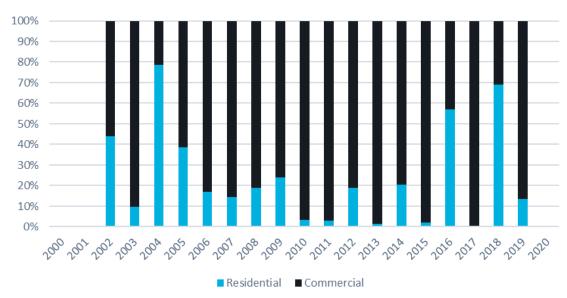


Figure D.13: Residential Floorspace as a % of Total Floorspace, Old Street 500m



Figure D.14: Residential Floorspace as a % of Total Floorspace, Euston 500m

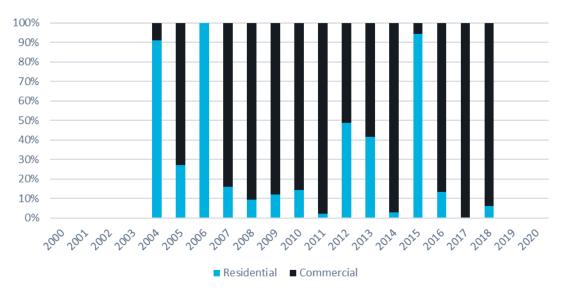


Figure D.15: Residential Floorspace as a % of Total Floorspace, Paddington 500m



Source: London Development Database, 2022

D.29 When placed in the context of some of the larger data areas considered, King's Cross St Pancras presents a much more commercial picture. As outlined in the number of consents analysis, this generally reflects the trends we would expect with heightened demand for commercial floorspace in areas in close proximity to transport infrastructure.



Figure D.16: Residential Floorspace as a % of Total Floorspace, Tech Belt

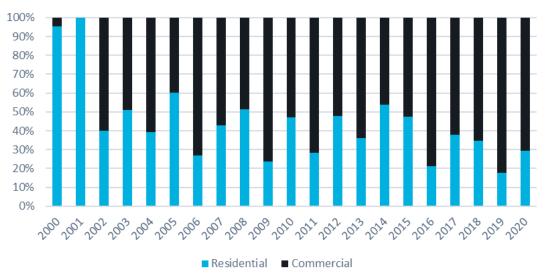
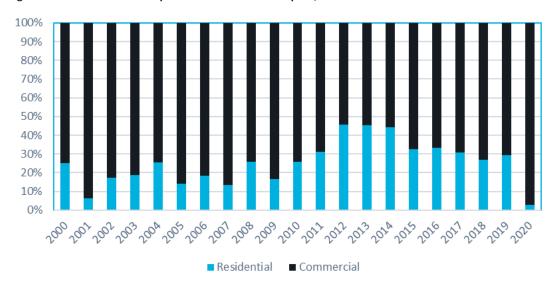


Figure D.17: Residential Floorspace as a % of Total Floorspace, CAZ



30% 20% 10% 0%

100% 90% 80% 70% 60% 50% 40%

2008 2009 2010

■ Commercial

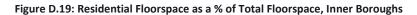
Residential

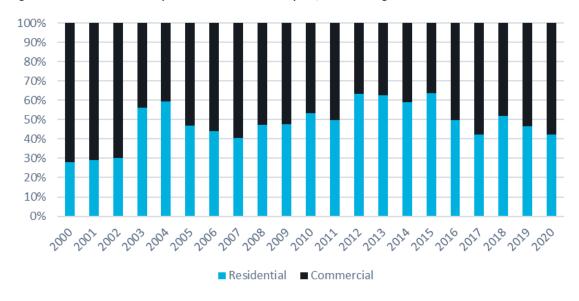
2012 2013 2014 2015 2016 2017 2018 2018 2020

Figure D.18: Residential Floorspace as a % of Total Floorspace, Camden

Source: London Development Database, 2022

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