Case Study

London King's Cross[245]

1 Introduction

King's Cross Terminus—including St. Pancras and Euston stations—is expected to function as the principal transit center for London. The 2004 London Plan anticipated King's Cross becoming the most accessible location in Greater London, with the completion of the Channel Tunnel Rail Link – High Speed 1 (HS1), Thameslink 2000, and the Cross River Tram. King's Cross is also the biggest inner-city transit interchange in London, linking six metro lines at one venue.

The King's Cross Regeneration Program entails the transformation of a 27-hectare area in central London on former rail land to the north of King's Cross and St Pancras stations into a mixed-use urban regeneration project, with up to 739,690 square meters of floor space. This regeneration program, one of the largest in Europe, has managed to attract a number of lead tenants, including Google, and has turned a disused area of London into a new vibrant urban space. It is also expected to provide substantial returns to its developers in the medium to long terms. From a planning perspective, King's Cross is a unique development, considering the six years it took to design and negotiate. The process included four rounds of public consultation, involving around 30,000 people, leading to a well-tailored solution for urban regeneration.

This case study illustrates the process of leveraging high connectivity and public-private partnerships (PPPs) in increasing real estate market value of areas around a major railway hub. Such approach exemplifies a strategic approach to urban transformation through Transit Oriented Development (TOD)[246].

2 Regeneration Programme

In Victorian times, King's Cross was an important industrial transport center. However, by the late 20th century, the area had become one of disused buildings, railway sidings, warehouses and contaminated land. By the 1980s, it had some of the lowest rent areas for central London, with ample vacant land. Plans for redevelopment in the early 1980s fell through, due to weak market conditions and uncertainty about delivering the high-speed Channel Tunnel Rail Link (CTRL), now

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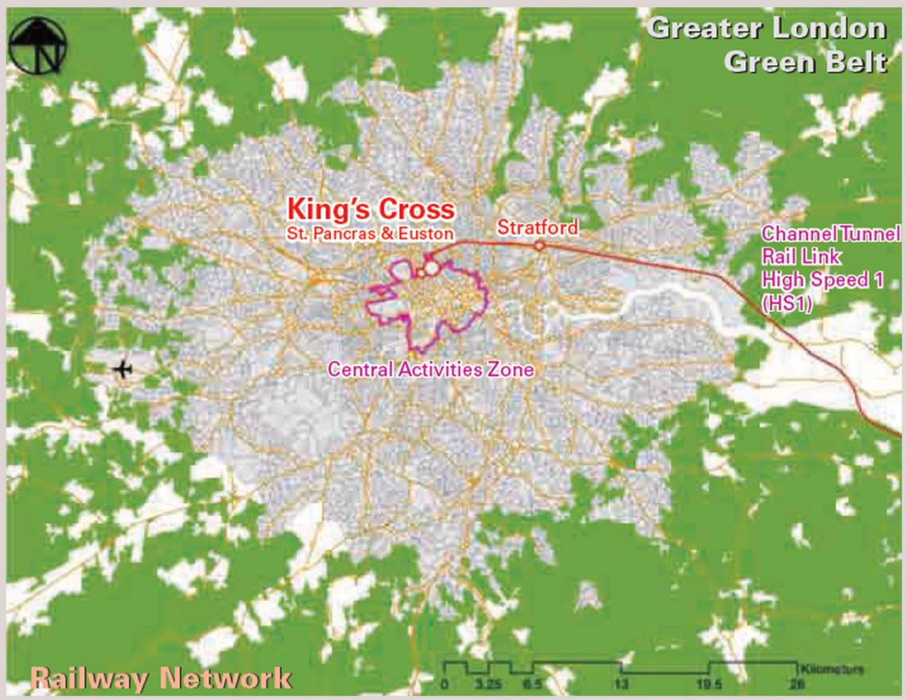
[245] This case study is largely based on Lawrence, Martha; Ollivier, Gerald. 2015. *Attracting Capital for Railway Development in China*. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/23800 License: CC BY 3.0 IGO. URI: http://hdl.handle.net/10986/23800

[246] Transit Oriendted Development (TOD) is outlined in the 2017 publication "Transforming cities through Transit Oriented Development: the 3V Approach", The World Bank. Available at: http://hdl.handle.net/10986/26405

called High Speed 1 (HS1) and related development projects. The location of King's Cross, to the north of central London, was also not aligned with London's focus on regenerating its east side (Docklands).

Over the past decade, London started to experience growing market demand, with a rapid increase in the number of jobs in the City of London and in particular in central London (reaching densities of 155,000 per square kilometers), and in the rapidly developing Canary Wharf, a business district located in East London. The 1996 decision to move HS1 from Waterloo to St Pancras station (facing King's Cross station) became a catalyst for change in the King's Cross area. It involved major infrastructure investments in the St Pancras station and its surroundings, with reconstruction of interchanges to the metro links. The area was identified as one of the five "Central Area Margin Key Opportunities" in the strategic planning guidance for London. The landowners – London & Continental Railways (LCR) and DHL – decided to develop the land.

Figure 1 Location of King's Cross Station and High Speed 1 on Greater London's Railway Network, 2011

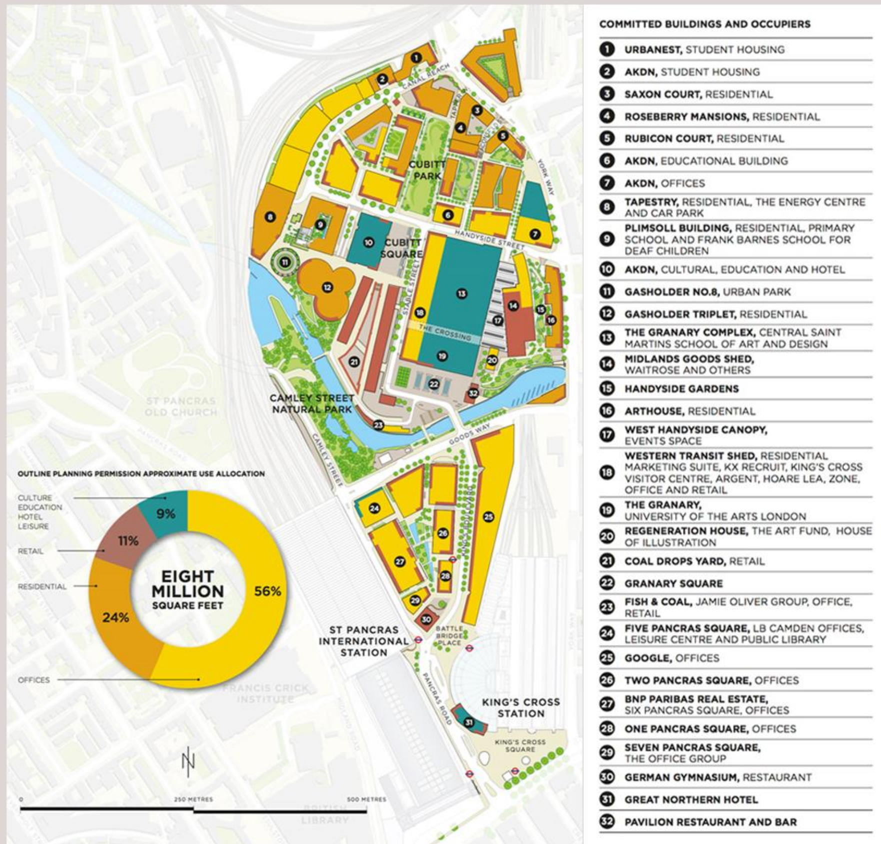


Source: Data from the London Datastore, Greater London Authority, and Open data, Transport for London.

The landowners were also encouraged by the implication of upgrades and restoration of the underground stations and national mainline stations on the site, set to be completed by 2007. They realized that any proposal would need to respond to and accommodate the large number of people who would be using the new international interchange.

About 27 hectares of land is planned to contain more than 1,900 homes, 50 new and refurbished office buildings, 500,000 square feet (about 47,000 square meters) of shops and restaurants, 20 new streets, and 10 major new public spaces for a projected 50,000 people (Figure 2). While the majority of private floor space will be allocated to produce business profits, more than 40 percent of the redeveloped former "brown-field" site will be used for public purposes, and, across the redevelopment site, 20 historic buildings will be restored for modern use.[247] Figure 2 below shows the map and the committed building and occupiers as of 2016.

Figure 2 Redevelopment Schemes of the King's Cross Opportunity Area



Source: 2016 Argent (Property Development) Services LLP. Used with permission

3 Redevelopment Approaches

The following approaches have been applied to the King's Cross redevelopment programme:

Generating high market value around a highly connected hub with substantial market potential through high quality public space

King's Cross, in the core of London, is a major interchange station of the city, of UK, and of Europe. King's Cross is the biggest inner-city transit interchange in London, linking six metro lines at one venue. King's Cross Central combines two major train stations (International high speed Eurostar and domestic) and is also

[247] Urban Land Institute (ULI) (July 2014). *ULI Case Studies: King's Cross*. Retrieved from: http://casestudies.uli.org/wp-content/uploads/sites/98/2016/01/kingscross_16pgs_v11.pdf

one of the busiest routes for buses (17 routes). Its ridership is up to 140,000 commuters, visitors and residents per day. Passengers can reach the center of Paris in 2hrs 15, Brussels in 1hr 51 and Lille in 1hr 20. These destinations will be joined by Amsterdam, Cologne, and Frankfurt via Deutsche Bahn's high speed ICE. This transport hub is expected to support 63 million passengers a year from 2020.[248]

The King's Cross regeneration program aims at delivering an accessible, high-quality mixed-use environment, with a strong focus on art, culture, and heritage. The provision of good quality public space enhances the image and appeal of a location. Over £2 billion has been spent on the local transport infrastructure, including St Pancras station and public areas. The master plan presented a network of public open spaces, streets, lanes, squares, and parks that permeated the urban blocks and made connections beyond the site into the wider city.

The development of the site is anchored by a vision under which it transforms from a slightly decentered derelict place to a core part of central London, which would work 24 hours a day and seven days a week, and would be open, democratic and accessible. That meant dividing the area into development zones, with maximum building heights, and environmental specifications, but also producing hundreds of urban design analysis options, to define possible use and leverage the existing historical heritage in the area like Granary Square. The historic fabric was embedded in the plan in a sophisticated manner, rather than simply preserved. Each retained building has a new use, and each has a relationship to its neighbors and the spaces in between.

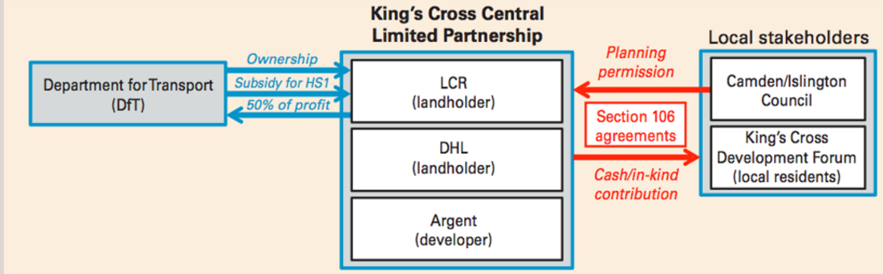
Public-Private Partnerships (PPP) for infrastructure funding and property development

In London, local governments and the private developer redeveloping the King's Cross rail yard stress the importance of sharing the costs and benefits conferred, particularly around the newly integrated transit terminus.

The partnerships and stakeholders involved in the redevelopment scheme around King's Cross are shown in Figure 3.

[248] The estimated number of passengers are for the total, accounting for six London metro lines, domestic railway lines and international high-speed rail lines. Based on: Urban Land Institute (ULI) (July 2014). *ULI Case Studies: King's Cross*. Retrieved from: http://casestudies.uli.org/wp-content/uploads/sites/98/2016/01/kingscross_16pgs_v11.pdf

Figure 3 Stakeholders and Partnerships in the Redevelopment Scheme around King's Cross



Note: HS1 = High-Speed 1; LCR = London and Continental Railways.

Source: Financing Transit-Oriented Development with Land Values (World Bank 2015)

Partnership with the private developer

LCR[249] has played a crucial role for the regeneration around King's Cross. In 1996, as a private consortium, LCR was selected by the UK Government to build and operate HS1, a high-speed rail link. One of the key objectives behind HS1 was to stimulate regeneration in inner London and in particular around King's Cross.

In 2001, LCR selected property developer Argent, one of the UK's most respected property developers, was selected as a private development partner for the King's Cross regeneration program, given its rich experiences in regeneration and mixed-use developments. With a strong portfolio of urban regeneration projects and mixed-use development, Argent proceeded to plan, manage, and deliver the scheme starting in the same year. Argent started from a blank piece of paper, built the scheme on principles and precedents, and then realized these in the master plan. Aside from active public consultation, there were also two master planning teams and four independent design review panels that allowed for the development of a tailored solution for the site over six years of planning. The master planning and consultation were paid for by Argent, but were offset as upfront cost within the financial arrangements with LCR. The developer took the overall planning risk. Argent brought the backing from a large pension fund (BTPS managed by Hermes Investment Management), essential for the private development of the site.

The London Borough of Camden granted outline planning permission for regeneration in 2006, with a target completion date of 2016. Argent entered into a joint collective ownership acquisition and development agreement with the landowners, LCR and DHL. This deal included an agreement that the land was to be valued based on its open market value, following the approval of planning permission and completion of the Channel Tunnel Rail Link. Upon valuation, Argent was given the option of acquiring the land from the landowner or entering into a 50/50 partnership. It chose the latter option – a long-term 50/50 development partnership. This

[249] LCR subsequently ran into financial difficulties and has been owned by the Department for Transport (DfT) since 2009. After the delivery of HS1, in November 2010, LCR sold HS1 with its 30-year concession for the track and stations to a consortium for £2.1 billion. As of early 2015, LCR's primary focus had become in the area of property development and land regeneration and was a joint venture partner in two major regeneration programs, at King's Cross, in partnership with Argent and DHL, and at the International Quarter, Stratford City, in partnership with Lend Lease.

created the King's Cross Central Limited Partnership (KCCLP), which became the single landowner and developer of King's Cross[250], making development and delivery easier.

The price paid by Argent was to be discounted according to that value, with that discount increasing as the open market value of the land rose. The deal incentivized Argent to optimize the value of the scheme. The agreement was that the crystallization of land value would come when the landowners – LCR and DHL – could provide vacant property, after HS1 was completed and open and the developer had completed planning and a viable business plan and secured funding. The partnership was designed provide financial return when certainty was delivered by all parties, for the benefit of all parties.

The partnership made a £250 million investment in infrastructure at King's Cross Central since 2009 to 2014, which unlocked the 6 million square feet (557,000 square meters) of development on the project. The partnership's equity funding went towards new roads, new public spaces, a new bridge across Regent's Canal, canal-side improvements, and the Energy Centre and its associated district heating and distribution networks.[251]

LCR adopts a long-term strategy with respect to the development of King's Cross Central. It focuses on minimizing property cost and maximizing the value of assets.[252] Land is valued in nominal terms in its financial statement. The value of land rises over time as development takes place. Many of the people working on the project have been involved from the beginning. This brings an unusual level of continuity and commitment. A holistic approach was adopted for the regeneration of Kings' Cross regeneration scheme. All the landowners are working together within one overarching, shared vision.

The primary risks for the business relate to the uncertainties of the economy and in particular the strength of the property market. These risks are managed actively through the governance of the joint venture companies and the skills of the commercial development partners.[253]

Partnership with the Central Government

Originally, HS1 was planned to be privately financed, owned, and operated, but there was significant doubt about the project's financial viability. Consequently, as part of the financing arrangements for the construction of HS1, the Department of Transport (DfT) provided cash grants, underwrote a bond issue, and provided property development rights around King's Cross and Stratford stations to LCR. This arrangement was to continue until the concession contract expires in 2086, at which point the assets would be returned to the government. Following the sale

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[250] As of early 2015, U.K. property developer, Argent had a 50 percent interest, the now U.K. Government-owned LCR, holding a 36.5 percent interest, and DHL Supply Chain (formerly Exel) with a 13.5 percent stake.

[251] Urban Land Institute (ULI) (July 2014). *ULI Case Studies: King's Cross*. Retrieved from: http://casestudies.uli.org/wp-content/uploads/sites/98/2016/01/kingscross_16pgs_v11.pdf

[252] Department for Transport (DfT) (2011). *Department for Transport: Land Strategy*. Retrieved from: https://www.gov.uk/government/publications/department-for-transport-land-strategy-housing-land-supply

[253] Ibid

of HS1, LCR was restructured into a property development entity in 2011. Based on the 1996 arrangement between the government and LCR, DfT expected to receive a 50 percent share of LCR's net profit after deducting the costs for the King's Cross development scheme.

Partnership with local communities

The process of development for King's Cross entailed major engagement, based on publication of proposals and active discussions with local communities. It led to the development of ten design principles for a human city, as well as the preparation of parameters for regeneration, learning from other examples in London. Those were embedded in a series of design frameworks, guiding the individual parcels. There were four rounds of public consultation, allowing a balancing of local benefits against profitability for the developer. Both the developer and the government listed and adapted the scheme.

One key land value capture technique adopted by local governments in England and Wales is their use of Section 106 of the Town and Country Planning Act of 1990. This provides a means for local authorities to negotiate agreements or planning obligations with a landowner or developer, in association with the granting of planning permissions. Section 106 agreements can be financial in that landowners or developers are required to make some sort of financial commitment (lump sum or recurring) in exchange for development permission; or can be in-kind support to local interest, such as affordable housing or community facilities. S106 agreements have to be related to offsetting the impacts of the development, and be in accordance with an approved plan. They cannot be cash payments for general community services. The rules are clearly set out in Government guidance. Once a Section 106 agreement is signed and planning permission is granted, developers have three years to exercise their property development rights, or the permission lapses.

The Section 106 agreement package around King's Cross includes cash and in-kind contributions to the provision of local infrastructure and community services by the joint developer for the Camden council, including £2.1 million to create 24,000-27,000 local jobs through a Construction Training Centre and Skills and Recruitment Centre; 1,900 homes, more than 40 percent of which will be affordable housing[254]; cash and in-kind contributions for community, sports, and leisure facilities; new green public spaces, plus new landscaped squares and well-designed and accessible streets, accounting for about 40 percent of the entire site; a new visitor center, education facilities, and a bridge across the canal to link streets; and cash contributions to improve adjacent streets, transit stops, and bus services[255].

Long-term commitment and flexibility for land value capture

Regeneration initiatives must have a long-term perspective if a lasting contribution is to be made.[256] This requires a long-term commitment from all stakeholders, including the developer, residents, occupiers and public services.

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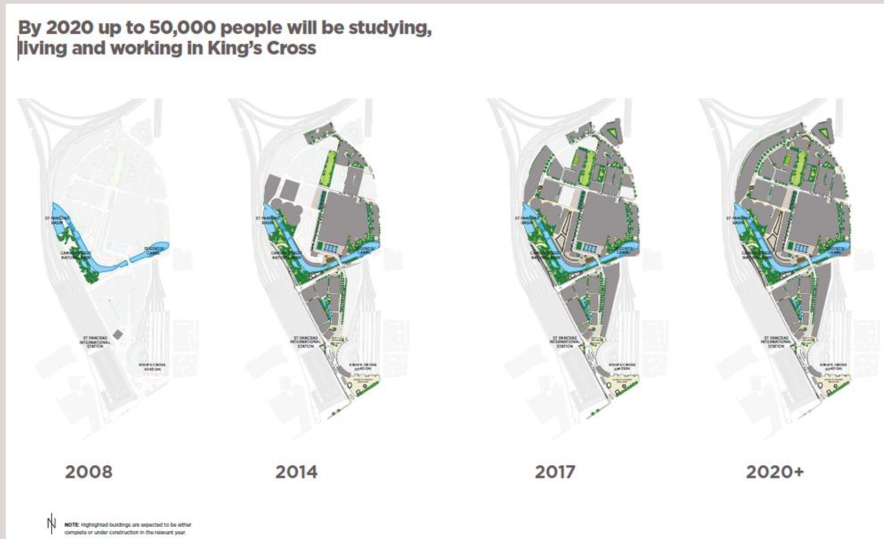
[254] Affordable housing is targeted at couples with a combined income below £60,000, and arranged for people with skills needed by the city.
[255] Camden Council 2006.
[256] British Urban Regeneration Association 2002

Plans to redevelop the King's Cross area started in early 1990s, a vision was outlined in 1997, the outline planning permission was granted in 2006, with a target completion date of 2016. A long-term vision to be implemented by stages was also set (Figure 4).

Figure 4 Figure 4 Long-term Vision for King's Cross Regeneration Scheme



Source: King's Cross Regeneration Review 2014

Under the supervision of the DfT, LCR has been mandated to maximize its long-term asset value, and its development strategy has been to use its major sites as equity to participate in joint-venture development companies that can make long-term profits through urban regeneration around the HS1 stations—mainly King's Cross and Stratford.

Local authorities also supported a long-term redevelopment approach by allowing flexibility in the planning permission. The Section 106 agreements for King's Cross set out very flexible allocations of property floor uses, allowing the joint developers to respond to changes in market and other conditions as the regeneration proceeds. The agreement contains the broad principles of the redevelopment scheme with "floor space maxima" to guarantee diverse site use. Yet these allocation figures allow for some flexibility as redevelopment is likely to take 10-15 years to complete. Thus, floor space of one use could, to a limited extent, be traded against another, depending on market conditions. This flexibility in planning parameters allowed the regeneration to be adjusted to market needs over time.

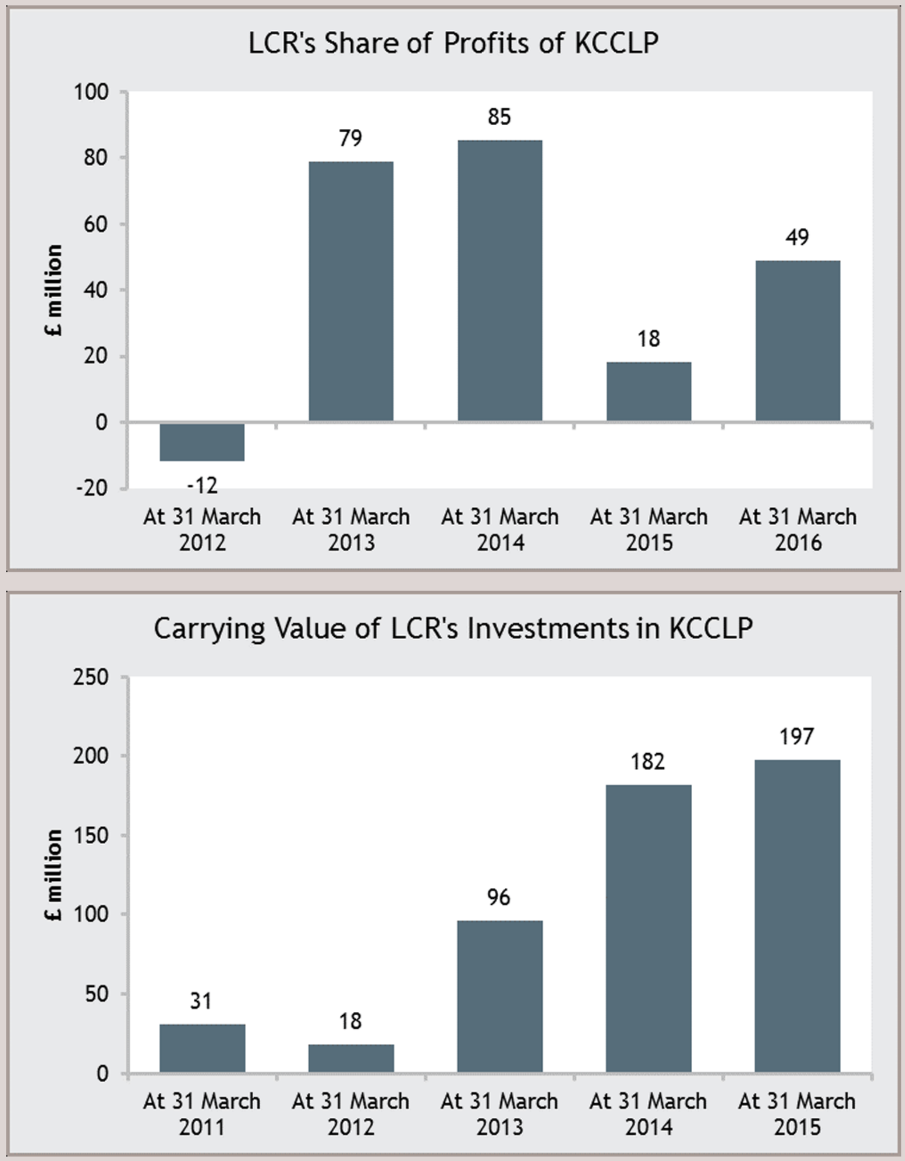
4 Results

Financial impact

Since LCR has been restructured into a property development and management company, a central feature of LCR's business profile is that returns from LCR's property interests are expected to be mainly in the form of capital appreciation in the 5-10 year time horizon.

By March 31, 2014, over 57 percent of the regeneration project by floor area had been either completed or committed. The project continued to make good progress and started to make financial contributions to LCR. LCR recognizes its 36.5-percent share of KCCLP results, which amounted to £85.1 million for the financial year ended March 31, 2014.[257] In the financial year ending March 31, 2016, LCR's profit was £48.9 million.[258] On January 22, 2016, LCR sold its shares in KCCLP to Australian Super for £371.1 million. This brought Australian Super's ownership in KCCLP to 67.5 percent.

Figure 5 LCR's Share of Profits of KCCLP and Carrying Value of LCR's Invest-ment in KCCLP



Source: LCR group reports and accounts

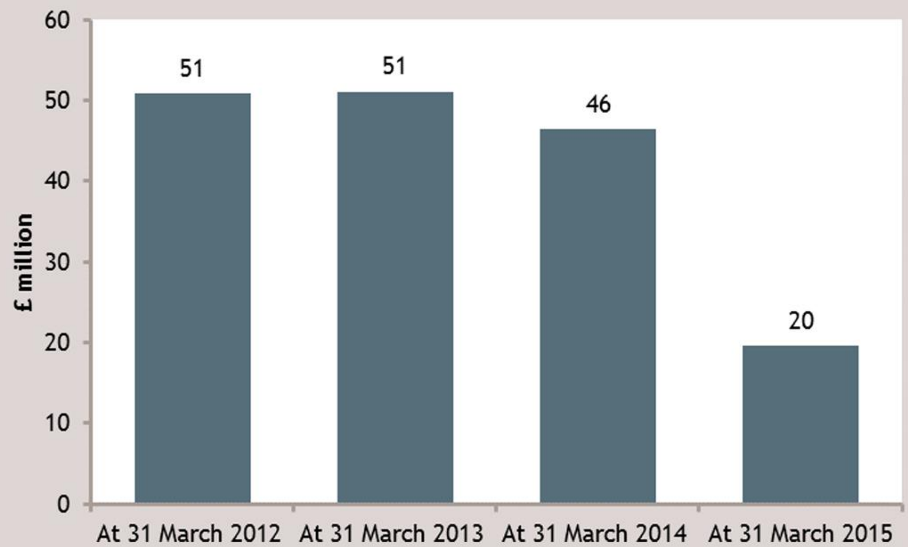
The financial contributions to LCR through King's Cross redevelopment for the last five financial years and the carrying value of LCR's investments in KCCLP are

[257] LCR group report and accounts.
[258] *Ibid*

shown in Figure 5. The increases in the profit contributions and investment carrying value are predominantly arising from disposal and revaluation of investment properties.

Loans were also provided by LCR to KCCLP for the regeneration, as shown in Figure 6.[259]

Figure 6 Loans by LCR to KCCLP



Source: LCR group reports and accounts

Social and economic benefits

The regeneration scheme around King's Cross is expected to directly deliver significant social and economic benefits and to fundamentally improve the physical environment, throughout the construction period and beyond. The construction program required a large amount of infrastructure to be built before any buildings were begun. This included improvements to local roads, phased opening of some routes through the site, improved drainage and storm water run-off (preventing flooding) and enhanced local electricity capacity. The length of the King's Cross Central construction period also means that there is the potential for the construction sector to become a long-term stable employment base within the local economy.

Ongoing development is transforming the physical environment around what was historically considered unsafe, underused and vacant land. The applicants are committed to the creation of a high quality public realm maintained by a comprehensive management regime. In fact, the development at King's Cross is fast becoming one of the most attractive places to live, work and visit in London, and there has been strong demand for both the offices and residential units, together with restaurants and retail shops opening.

[259] Loans to KCCLP were sold to Australian Super on 22nd January 2016.

The regeneration program is expected to also deliver thousands of new jobs. With the right employment brokerage and training measures in place, a significant percentage of them could be taken up by local people According to an assessment by LCR in 2009, the incremental economic impacts of HS1 combined with the regeneration of King's Cross were estimated to result in about 22,100 permanent jobs and 2,000 dwellings in the area. By 2020, it is anticipated that up to 50,000 people will be studying, living and working in King's Cross.

Moreover, development is expected to also significantly increase Business Rate and Council Tax revenues for the Local Authorities. The mix of uses and building types in the King's Cross Central proposals is expected to act as a catalyst for economic clustering and further diversity in industry sectors in North London. In turn, this would generate greater opportunities for training and wider choice of employment.

The first phase of the regeneration project started with a £100 million construction contract, the University of the Arts London, which opened its new campus in autumn 2011. Commercial space is thriving, with occupants such as Google, BNP Paribas Real Estate, and Louis Vuitton, which will bring more value and people to this area. Between the initial stage of development and 2014, average blended price of houses increased from £700 per square foot to £1,400[260] and rents for commercial space have exceeded initial expectations.

Google has spent about £650 million to buy and develop a one-hectare site from KCCLP on a 999-year lease. The finished development, which will be 93,000 square meters, will be worth up to 1 billion £[261]. Several thousand staff will occupy the low-rise structure when it is complete. The building will form an important part of the King's Cross scheme and will become the internet search firm's largest office outside its Googleplex corporate headquarter in California. The building will include 4,650 square meters of ground-floor retail. Google presence is expected to draw other technology companies to King's Cross – especially small start-ups – which will help to bump up rents. It is expected that when the regeneration scheme is complete, a total value of nearly £5 billion will be created[262].

Benefits to key stakeholders

DfT: DfT provided financial assistance, as well as development rights, to LCR for the construction and operation of HS1 and the regeneration around King's Cross. In return, it received part of LCR's net profit after deducting the costs for the King's Cross redevelopment program. As part of the government's deficit reduction program, LCR sold its 36.5-percent stake in KCCLP to Australian Super in January 2016, and the proceeds from that sale were returned to the Treasury.

Local authorities in London: They were consulted with during the planning of the regeneration program through the King's Cross Development Forum. The

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260 Urban Land Institute (ULI) (July 2014). *ULI Case Studies: King's Cross*. Retrieved from: http://casestudies.uli.org/wp-content/uploads/sites/98/2016/01/kingscross_16pgs_v11.pdf

261 As of June 2016, five floors of the building have been completed. Source: Business Insider UK http://uk.businessinsider.com/googles-new-11-storey-office-in-londons-kings-cross-2016-6

262 LCR Group Report and Accounts, 31 March 2014.

planning permission was granted with flexibility in planning parameters, which allowed the plan to be adapted to market conditions as the redevelopment proceeded. On the other hand, local authorities also required the partnership developer to provide cash or in-kind contributions to the infrastructure and facilities in the communities in exchange for the planning permission.

Local communities: There was intense consultation with local communities (over 4,000 meetings) during the planning process, which established the framework for the regeneration program to ensure that those living and working close by felt the benefits of the development.[263] Local communities benefit from the Kings' Cross regeneration scheme employment and training opportunities, housing, health and other community services and facilities, and safer, cleaner streets.

5 Conclusion

The King's Cross redevelopment program illustrates how a rail company (LCR) and its partners are in the process of generating high increases in real estate market value, near a major railway hub, by leveraging high connectivity, high quality public space, PPP, and public consultation.

The case study demonstrates the following four key concepts that can be adopted by railways around the world:

- Major market value can be generated around highly connected hubs, with substantial market potential, when combined with high quality public space;
- PPP is an effective instrument for infrastructure funding and property development of this type, seeking to find the right balance between the developer's long term aspirations to create and manage an estate and the local authority's desire to integrate development into the surrounding communities. The master developer can bring a wide range of skills and help secure long term financing;
- Active public participation can ensure a strong buy-in of stakeholders and achieve better results; and
- Such development requires long-term commitment and flexibility from all parties, in order to reflect and respond to evolving market needs.

[263] Urban Land Institute (ULI) (July 2014). *ULI Case Studies: King's Cross*. Retrieved from: http://casestudies.uli.org/wp-content/uploads/sites/98/2016/01/kingscross_16pgs_v11.pdf

References

ARUP (April 2014). *Argent St. George, LCR and Exel, King's Cross Central Regeneration Strategy*. Retrieved from: https://www.kingscross.co.uk/media/37-regen-strategy.pdf

Department for Transport (DfT) (2011). *Department for Transport: Land Strategy*. Retrieved from: https://www.gov.uk/government/publications/department-for-transport-land-strategy-housing-land-supply

Suzuki, H., Murakami, J., Hong, Y., and Tamayose, B. (2015). *Financing Transit-Oriented Development with Land Values*. Washington DC: World Bank Group.

Lawrence, Martha; Ollivier, Gerald. 2015. *Attracting Capital for Railway Development in China*. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/23800 License: CC BY 3.0 IGO. URI: http://hdl.handle.net/10986/23800

LCR Group Report and Accounts. Retrieved from http://www.lcrhq.co.uk/useful-information/financial-information/

Urban Land Institute (ULI) (July 2014). *ULI Case Studies: King's Cross*. Retrieved from: http://casestudies.uli.org/wp-content/uploads/sites/98/2016/01/kingscross_16pgs_v11.pdf