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ODPC Future Growth Sector Employment Study: First Stage Report

A Final Report by Regeneris Consulting

Old Oak and Park Royal Development Corporation (OPDC)

ODPC Future Growth Sector Employment Study: First Stage Report

February 2017

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Executive Summary

i. Regeneris Consulting was commissioned by the Old Oak and Park Royal Development Corporation (OPDC hereafter) to undertake the Old Oak and Park Royal Future Growth Sectors Employment Study.

ii. The objectives of the study are to:

- Identify future growth sectors within the Old Oak and Park Royal area, and undertake a comparative assessment of their potential contribution to economic growth.
- Provide insights into the key issues impacting on these sectors, highlighting opportunities and challenges for the growth of these sectors.
- Identify the areas / places within Old Oak and Park Royal which could be attractive to each growth sector, and consider the critical success factors for these.
- Provide evidence and recommendations for policies, strategies, tactical and strategic actions to support future employment, skills development and economic growth.

iii. A parallel piece of research has been undertaken examining the feasibility of developing a cleantech cluster in the OPDC area.

Policy and Strategic Context

iv. Old Oak and Park Royal are identified as Opportunity Areas in the London Plan and the Old Oak and Park Royal Development Corporation (OPDC) has been established as the planning authority responsible for guiding development across the area.

v. The Draft Local Plan for OPDC (2016) sets out an aspiration to deliver a minimum of 24,000 homes and 55,000 jobs at Old Oak in addition to protecting, strengthening and intensifying activity within the Park Royal Industrial Estate, creating 10,000 new jobs and 1,500 new homes.

vi. The OPDC Industrial Land Review suggests that there is "no limit to the level of demand for space", with the area hugely attractive to businesses seeking an industrial location close to central London and due to the release of industrial space across London reducing overall capacity . At the highest level, aspirations are set for employment development to be office focused in Old Oak, with Park Royal protected for industrial uses.

vii. The London Plan establishes aspirations for future economic growth in London, with a specific focus on securing the position of and growth in the digital and creative, low carbon, and finance and professional service sectors. This aspiration is clearly set out in the London LEP's London 2036: An Agenda for Jobs and Growth document. Recently, the Mayor published 'A City for all Londoners' (2016) which identifies a number of priorities to promote London as a global city, economic fairness and to help spread economic benefits.

viii. Sector specific aspirations have also been set more locally – particularly in Hammersmith and Fulham where there are aspirations to develop strengths in tech and innovation focused sectors, building on the opportunity granted by the Imperial West development. The London Sustainable

Development Commission (LSDC) have also undertaken initial work which has identified the potential to create a 'cleantech' cluster in the OPDC area.

ix. It is important to note that the London policy context is rapidly evolving in 2016, in the context of the election of a new Mayor and the result of the EU Referendum. The incumbent Mayor has emphasised that previous sector priorities such as creative industries will continue to be a priority. However, the overarching message is that London is 'open for business', and in the short term, the focus is likely to be placed on ensuring London retains its competitive position – across the whole economy.

Old Oak and Park Royal: Profiling the Economy

x. It is estimated that the Old Oak and Park Royal economy currently employs 43,100 people across around 1,700 businesses, with the majority of this activity located within Park Royal. Park Royal is a significant economic hub within London: it is London's largest industrial area and performs a vital role in supplying and supporting the London's economy.

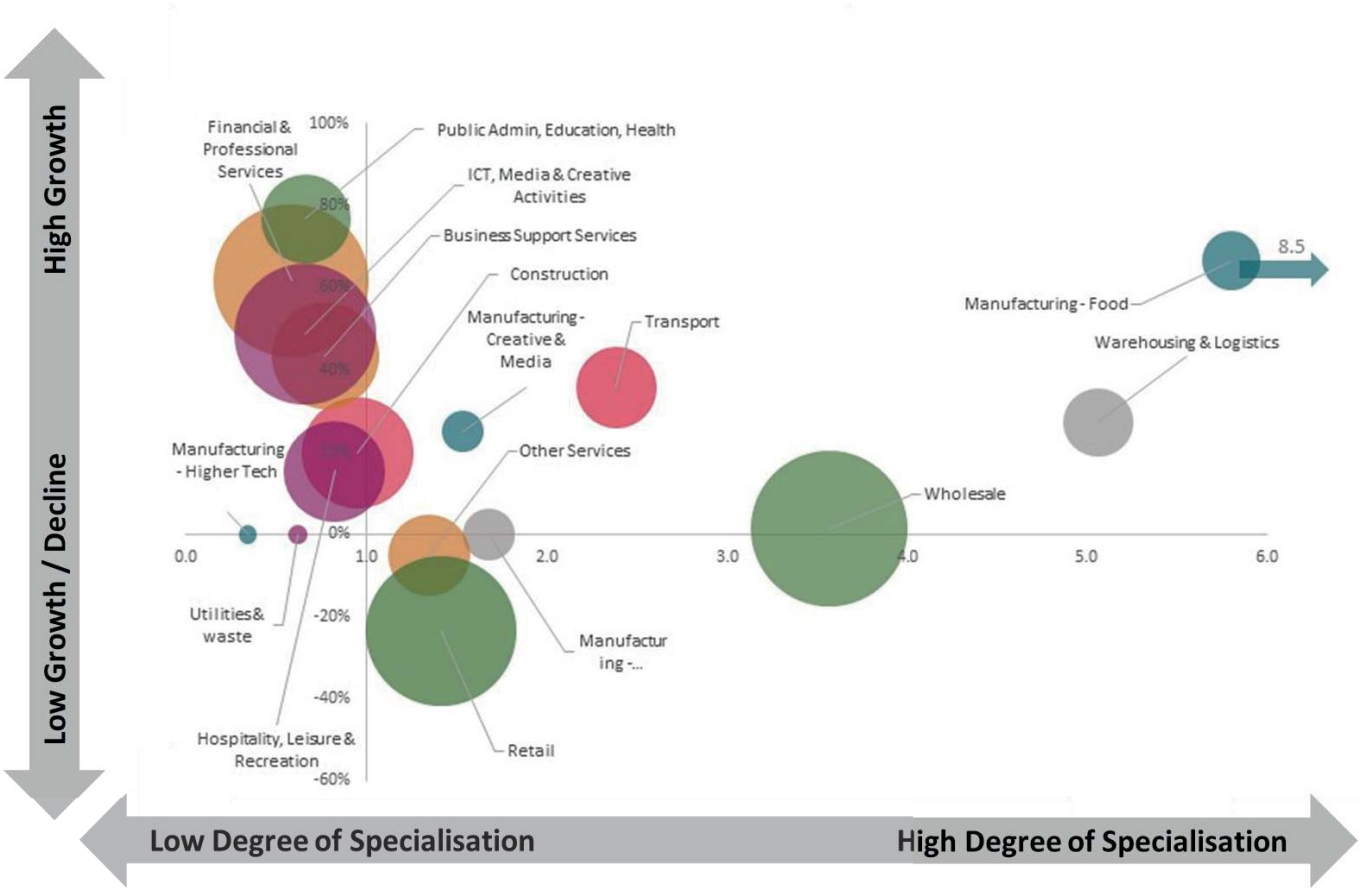
xi. The area has experienced strong growth in recent years, with employment growth of 19% (8,300 jobs) since 2009, which is higher than comparator areas. The business base has grown by 18% (350 businesses) over the same period.

xii. It is important that Old Oak and Park Royal is not considered in isolation. Reflecting its location within London, the area should be viewed as a constituent part of much wider functional economies. Wider economic factors of particular importance to the OPDC area include proximity to other economic hubs (eg central London to the east, and Heathrow to the west), wider regeneration and development investment taking place across London, major transport investments taking place in the area, and proximity to key economic assets (such as universities and research institutes).

xiii. The OPDC area is noticeable for the structure of its business base: while the majority of businesses are micro sized (with around three-quarters of businesses employing between 0 and 4 people), this proportion is low when compared to other areas. Reflecting the nature of the area, there is also a comparatively strong concentration of larger businesses in the area. This is illustrated in Figure 1.2 below.

xiv. A detailed analysis has been carried out of the sector profile of the area. This shows that, currently, the largest sectors in the OPDC development area are: wholesale (7,300 jobs); ICT, Media and Creative activities (6,700 jobs); public administration, education and health (6,400 jobs); retail (5,600 jobs); and business support services (5,900 jobs). Combined these five sectors account for 61% of all employment in the area. However, in terms of levels of relative specialisation, the most important sectors in the OPDC development area can be considered to be food manufacturing (4,400 jobs and LQ of 13.5), transport (2,500 jobs and LQ of 1.3), wholesale (7,300 jobs and LQ of 4.2), warehousing (3,100 jobs and LQ of 5.8), business support services (5,900 jobs and LQ of 1.1) and ICT, Media and Creative Services (6,700 jobs and LQ of 1.2).

OPDC Development Area Sectors: Size, Concentration and Trajectory – **Employment**



This chart summarises the current sector profile of the OPDC Development Area in terms of sector size, specialisation and recent change. It highlights the relative stregnth of the food manufacturing, and wholesale, transport and logistics sectors locally.

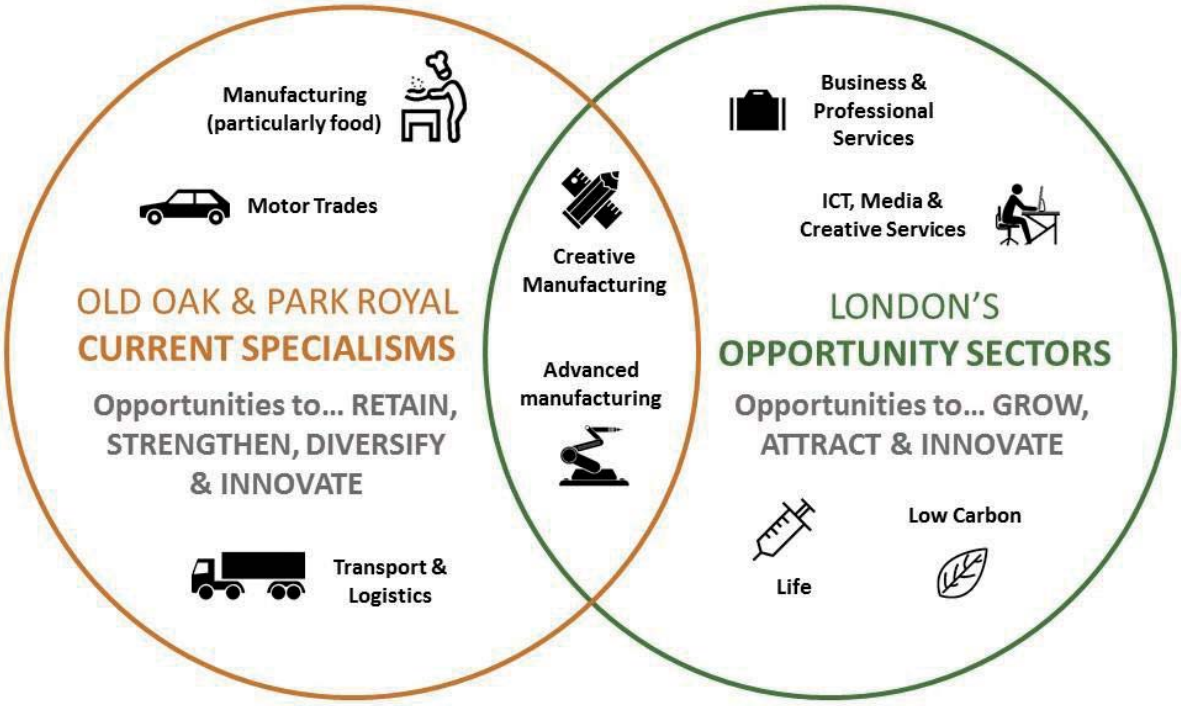
- **Size of the bubble** – denotes absolute number of businesses (2015)
- **Verticle positioning** – denotes recent business change (2009-15). Bubbles to the top of the chart have experieced high growth, while those to the bottom have experienced lower growth or decline
- **Horizontal positioning** – denotes degree of business specialisation relative to London (2015). Bubbles to the right of the chart are highly specialised locally), those to the left are less so.

Source: ONS BRES, 2014

Key Sectors for Old Oak and Park Royal

xv. Via the baseline research a number of key sectors have been identified. While these vary significantly in terms of their size, they are all activities which either currently define the OPDC economy, or / and which could contribute to future aspirations for economic growth, diversification and placemaking in the area:

- Existing economic strengths are largely in industrial type activities, in particular food manufacturing, transport, wholesale, logistics and to a lesser extent, motor trade activities. The area also appears to have growing strengths in a range of creative industries. There are opportunities to retain, strengthen and diversify these sectors.
- Future sector opportunities for the OPDC area have been identified. The nature of development at Old Oak means that future growth is likely to be focused around office uses with key sectors being professional and financial services; and ICT and digital media services. There are also potential opportunities within the low carbon (including clean tech), advanced manufacturing sectors and med-tech/life-science activities.



xvi. The characteristics of each of the key sectors, including current profile and the nature of the future opportunity, are explored in more detail over the following pages.

Current Sector Specialisms

Food Manufacturing: Sector Summary

FOOD MANUFACTURING

Manufacture of food and drink products

OPDC CURRENT OVERVIEW

JOBS (2014)

Number	4,400
% of all jobs	8%
LQ vs London	13.5

BUSINESSES (2014)

Number	50
% of all businesses	2%
LQ vs London	8.5

Majority of buildings occupied are warehouses or workshops

SPATIAL REQUIREMENTS

TYPICAL EMPLOY. DENSITIES

TYPICAL USE CLASSES

B1C	20-47 sqm
B2	36 sqm
B8	70-95 sqm

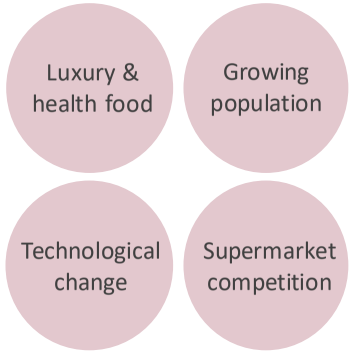
TYPICAL PREMISES TYPES

- Varied: factories; warehouses; light industrial, workshops.
- Demand particularly strong for small industrial units
- Typically require a large floorspace per employee
- Low rental costs are generally a consideration
- Important facilities include prep kitchens, refrigerated areas and warehouse space to store supplies/ finished product
- Potential for mixed & multi-storey premises.

WIDER REQUIREMENTS

- Food manufacturing firms producing fresh produce need to be as close as possible to their market - usually willing to pay a premium for this
- Start-up businesses in the sector often need support understanding the recognised safety and hygiene standards
- The traditional image of the sector has impacted upon low take-up by students pursuing food degrees and difficulties in attracting skilled and experienced applicants for jobs. Support needed to reverse this.
- Highest demand for jobs occurs across managerial roles and jobs in food science, product development and process, plant and machine operatives
- Good access to the latest research - Park Royal Food Innovation Centre provides this

DRIVERS INFLUENCING DEMAND



FUTURE SECTOR PROSPECTS

- Park Royal appears well positioned to continue to act as a hub of activity given its existing competitive advantage and the pressure on industrial land elsewhere in London.
- With this in mind, there is potential for employment growth in the sector locally in the period to 2041.

Potential for Sector Evolution

- Food research and innovation - sector is evolving production process and products. Area can build on existing food sector strength, proximity to research institutions and future transport enhancements
- Development of artisan / craft food manufacturing sector
- Embedding the food sector within place making aspirations
- Supporting the development of the Circular Economy

OPDC Sector Locations

- Larger food manufacturing activities – Park Royal is likely to remain the core location for larger more traditional manufacturing activities. These uses are largely suited to industrial locations, away from residential locations
- Craft / artisan food manufacturing – Park Royal, industrial edge and, where mixed activities are taking place (production / retail / consumption etc), town centre / mixed use development locations
- Supporting projects (eg produce markets)– potential across the area, particularly Old Oak development sites, inc. as meanwhile uses

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Transport, Logistics and Wholesale: Sector Summary

TRANSPORT, LOGISTICS & WHOLESALE

Sector includes warehousing, distribution, public transport, wholesale and postal activities

OPDC CURRENT OVERVIEW

JOBS (2014)

Number	12,900
% of all jobs	25%
LQ vs London	3.1

BUSINESSES (2014)

Number	520
% of all businesses	23%
LQ vs London	3.4

Majority of buildings occupied are warehouses or workshops

SPATIAL REQUIREMENTS

TYPICAL EMPLOY. DENSITIES

TYPICAL USE CLASSES

B1c 20-47 sqm

B8 70-95 sqm

TYPICAL PREMISES TYPES

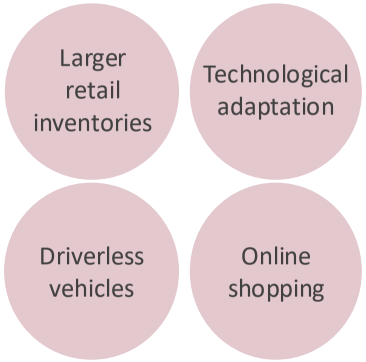
➢ Warehouses & logistics hubs of varying sizes

- Space which is within close proximity to the strategic road network enabling market access and infrastructure is critical
- Large sites and purpose-built facilities.
- Potential for multi storey premises & stacking
- Cost sensitive

WIDER REQUIREMENTS

- Technological adaption will improve productivity in the sector, but may also lead to reductions in employment in the future (e.g. driverless lorries, smart logistics). Technological developments require new and higher skilled labour
- Ageing workforce needs to be replaced
- Specific skills required by firms – a number of firms in the sector are facing recruitment difficulties
- Park Royal is under threat from other industrial areas (e.g. London Riverside) due to high land costs at space
- A shortage of LGV drivers especially at peak times of the year (e.g. Christmas)

DRIVERS INFLUENCING DEMAND



FUTURE SECTOR STRENGTHS

- Given existing strength, locational advantages, designation as SIL, and loss of industrial land elsewhere, demand expected to remain strong.
- With this in mind, there is potential for employment growth in the sector locally in the period to 2041.

Potential for Sector Evolution

- Consolidation and automation – move towards consolidated logistics centres, which focus distribution activities for a defined area through a single point. Automation is playing an increasingly important role
- Changes in modes of transport –changes in the way that goods are moved into and around the area. Includes intelligent sharing of vehicle space and better use of rail and water assets.
- Supporting the development of the Circular Economy – ensure that good vehicles leave and return to the area fully loaded (eg bringing packaging back for recycling / reuse).

OPDC Sector Locations

- Sector likely to continue to be focused within Park Royal. These uses are largely suited to industrial locations, away from residential locations.
- Some potential for spatial differentiation within sector – businesses serving strategic needs will require closest access to road networks (and potentially rail heads and water in the future). Smaller wholesale activities more likely to be located in Old Park Royal and on industrial edge.

Motor Trades: Sector Summary

MOTOR TRADES

Sector consists of business activities in the sale and repair of new and used vehicles

OPDC CURRENT OVERVIEW

JOBS (2014)

Number	1,700
LQ vs London	4.7

BUSINESSES (2014)

Number	120



Majority of buildings are workshops or yards

SPATIAL REQUIREMENTS

TYPICAL USE CLASSES

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TYPICAL PREMISES TYPES

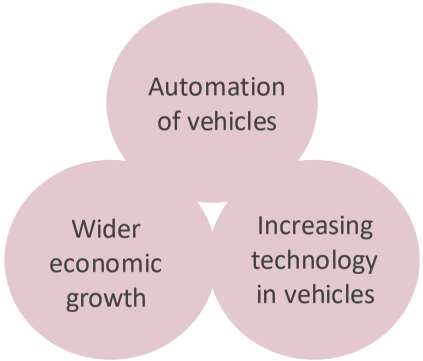
- Road-side showrooms; industrial estate workshops
- Industrial estates/ local sites

- Car showrooms: highly visible sites with good access to main transport routes and eye-catching frontages
- Garages: large workshop space with good access to road network. Some may require specific environmental controls

WIDER REQUIREMENTS

- Sector requires a high proportion of skilled trade staff with specific sector-related technical skills. High proportion jobs require Level 3 / apprenticeships qualifications
- New technology/ cars require constant training to understand latest technology
- Also high demand for management and leadership skills (especially in car showrooms)
- Pressure on motor trade sites in other parts of London means that park Royal will continue to attract businesses in this sector.
- Sudden shift towards autonomous vehicles could generate a spike in demand for cars in the future (Innovate UK)
- The sector is not seen as a priority sector for London, especially given emphasis placed on reducing carbon emissions across the capital and rising public transport usage

DRIVERS INFLUENCING DEMAND



FUTURE SECTOR PROSPECTS

- In the short term, employment in the sector is likely to decrease unless Car Giant is able to find a new site in the area. Demand is likely to be sustained for smaller scale retail and repair activities, reflecting ongoing demand for new and used cars, ongoing need for vehicles to be serviced, and pressure on such space elsewhere.
- In the longer term, (beyond 10 years), technological change may result in significant changes in the sector: the advent of shared, automated vehicles is expected to result in a significant reduction in individual car ownership and hence reduction in demand for space from car dealerships and motor repair uses.

Potential for Sector Evolution

- In the longer term automated vehicles are likely to reduce demand for space from car dealerships and motor repair activities.
- There may be opportunities to develop new specialisms. For example, automated vehicles may be operated by companies in large fleets. These will require significant space for parking and servicing between use. Park Royal could be appropriate for this given its proximity to central London and the strategic road network.

OPDC Sector Locations

- Once Car Giant has left its current Old Oak Common location, the sector is likely to be focused in Park Royal.
- Will continue to be focused in areas with good access to highways (e.g. near existing clusters along and close to A40)

Future Opportunity Sectors

ICT, Media and Creative: Sector Summary

ICT, MEDIA & CREATIVE SERVICES

Sector includes activities in TV production, computer consultancy, software development, advertising agencies, publishing and performing arts.

OPDC CURRENT OVERVIEW

JOBS (2014)

Number	6,700
% of all jobs	13%
LQ vs London	1.2

BUSINESSES (2014)

Number	290
% of all businesses	13%
LQ vs London	0.7

The sector typically occupies small or large office premises or shared workspace

SPATIAL REQUIREMENTS

TYPICAL USE CLASS: B1a

TYPICAL EMPLOY. DENSITIES: 10-13 sqm

TYPICAL PREMISES TYPES

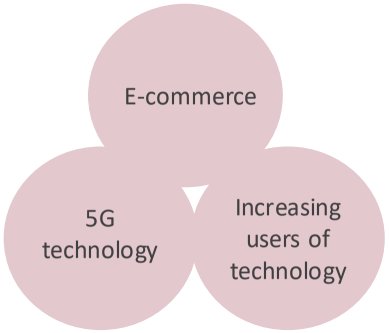
- Office space
- Light industrial
- Shared workspace
- Studio / bespoke space

- High quality facilities in prestige location for HQ functions with excellent infrastructure
- Excellent broadband and a strong area amenity offering remains important
- Increased home working is reducing need for space/ increasing demand for flexible premises
- Businesses in the sector have a very high propensity to cluster. Clusters are typically located in major business parks or city centres

WIDER REQUIREMENTS

- Requires highly qualified workforce with IT and software skills
- Low operating costs relative to Central London becoming increasingly important
- Access to advanced technologies and University Research for R&D
- Accessibility to labour, customers and markets is paramount
- Often requires government support to grow cluster
- Currently a gap in the provision of private funding and debt finance that goes beyond initial start up or individual projects
- Affordable and flexible workspace is needed to support start-ups and business growth
- Need for superfast broadband to attract firms

DRIVERS INFLUENCING DEMAND



FUTURE SECTOR PROSPECTS

- Rapidly developing sector across London and a key focus for national government. Potential for strong growth in the sector in OPDC area reflecting delivery of office space and proposed transport improvements.

Potential for Sector Evolution

- It is likely that the sector will evolve significantly in the area over the plan period.
- The delivery of office space (and related infrastructure and amenity improvements) at Old Oak Common will help to attract new higher value ICT and creative service activities to the area.
- However, given the strength of competition in the sector across London, significant work will be required to attract investment and anchor tenants to the area.
- Also there are change in working patterns and trends (eg home working and decentralisation) which have the potential to impact on demand.
- There is also potential to build on west London's strong media sector to attract new media activities to the area

OPDC Sector Locations

- This sector is relatively flexible in its locational requirements, and could be located in town centre / mixed use development locations, industrial edge or core industrial areas.
- Larger footplate office most likely to be focused around Old Oak Common (and to a lesser extent North Acton) given delivery of new space and access to strong transport and amenity.
- Scrubs Lane, Old Park Royal and Victoria Road are likely to be attractive locations for smaller creative businesses.

Business and Professional Services: Sector Summary

BUSINESS & PROFESSIONAL SERVICES

Sector includes activities in finance, professional services, administrative support and business support services (e.g. cleaning and security).

OPDC CURRENT OVERVIEW

JOBS (2014)

Number	10,500
% of all jobs	20%
LQ vs London	0.6

BUSINESSES (2014)

Number	600
% of all businesses	26%
LQ vs London	0.7

Current sector strengths in business support services

Buildings are mainly small offices with some workshop & warehouse premises

SPATIAL REQUIREMENTS

TYPICAL USE CLASS: B1a

TYPICAL EMPLOY. DENSITIES: 10-13 sqm

TYPICAL PREMISES TYPES

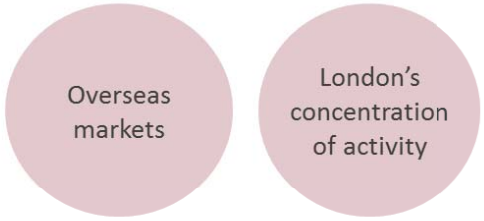
- Office space
- Shared workspace

- High quality facilities in a prestige location for HQ functions
- Access to a large number and good quality facilities for staff nearby
- Good transport links for staff (inc public transport)
- Shared workspace or co-working space is becoming increasingly important for SMEs
- Attractive neighbourhoods with mixture of uses to attract highest skilled workers

WIDER REQUIREMENTS

- Over half of workers in the sector are degree level or above
- Demand for those with IT skills
- Low operating costs becoming increasingly more important. Office developments in OPDC area presents an opportunity to attract firms from Central London put off by high rents
- Rapid market access
- Flexible workspace for smaller businesses
- Good access to overseas markets – the provide some of the largest opportunities for firms in this sector
- **BUT….** Brexit impact - will depend on trade deals agreed. Financial / professional services businesses may relocate parts of the business elsewhere

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FUTURE SECTOR PROSPECTS

- Strong growth potential in the coming years. This is one of London's key priorities for growth. The delivery of significant amounts of office and other mixed use floorspace within Old Oak Common sites, along with the arrival of HS2 and Crossrail will make this an attractive location for office activities.

Potential for Sector Evolution

- It is likely that the sector will evolve significantly in the area over the plan period.
- The delivery of office space (and related infrastructure and amenity improvements) at Old Oak Common will help to attract new higher value professional and financial service activities to the area.
- However, given the strength of competition in the sector across London, significant work will be required to attract investment and anchor tenants to the area.
- Business support services are likely to continue to remain an important source of employment. These have the potential to play a role in supporting the delivery and operation of new development in the area.

OPDC Sector Locations

- Professional and financial services – most likely to be located in close proximity to the new Old Oak Common station (and to a lesser extent North Acton) given delivery of new space and access to transport and amenity
- High street professional services – most likely to be co-located with other retail and leisure uses at Old Oak Common and Park Royal Centre
- Business support services – more flexible, and will be located across the whole of the area.

Creative Manufacturing: Sector Summary

CREATIVE MANUFACTURING

Sector includes the manufacture of clothing, printing and reproduction of video recordings

OPDC CURRENT OVERVIEW

JOBS (2014)	
Number	250
LQ vs London	1.1

BUSINESSES (2014)	
Number	25
LQ vs London	1.5

Majority of businesses in the OPDC are micro businesses occupying small workshops or warehouses

SPATIAL REQUIREMENTS

TYPICAL USE CLASSES: B1C, B2

TYPICAL EMPLOY. DENSITIES

20-47 sqm

36 sqm

TYPICAL PREMISES TYPES

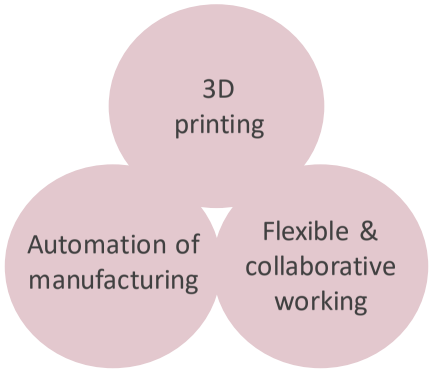
- Light industrial units; workshops
- Shared / bespoke workspace facilities

- Wide variety of space and facilities required
- Shared makerspace attractive for start ups, with high flexibility, resource and support
- Businesses have a high propensity to cluster- a central shared workspace facility or research asset often acts as an anchor for such clusters.
- Grow-on space is needed to develop a creative cluster and build networks
- Potential for multi storey premises & stacking

WIDER REQUIREMENTS

- Majority of creative manufacturing businesses in the OPDC area are micro businesses- reflecting freelance nature of the sector
- Workspace available on highly flexible terms or at below market rates is often seen as key in supporting creative clusters
- Smaller firms often require access to finance to grow their business
- Accessibility to labour, customers and markets
- Increasing automation by larger firms will see creative talent released, who may set up new businesses
- Online retailing gives SMEs a platform to sell products cheaply
- A range of relevant resources and tools for production (e.g. 3D printers & kilns)
- Entrepreneurship and business management skills needed

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FUTURE SECTOR PROSPECTS

- Potential for growth in the sector in future years. That said, absolute levels of activity in the sector are likely to remain relatively small in comparison to other employment sectors.

Potential for Sector Evolution

- Embedding the creative manufacturing sector within place making aspirations – sector has strong place-making potential. Embedding the sector within new developments could serve a twin purpose of helping to create sense of place and identity and also supporting local start-ups and SMEs
- Supporting the development of the Circular Economy – as with other manufacturing sectors, there are strong potential links to the circular economy, particularly around reuse of waste.

OPDC Sector Locations

- More suited to industrial locations throughout Park Royal
- Also potential suitable for some Old Oak sites – such as Channel Gate and Old Oak North (building on existing businesses)
- Smaller scale / craft activities also potentially suited to locations such as Scrubs Lane.

Advanced Manufacturing: Sector Summary

ADVANCED MANUFACTURING

Sectors includes manufacturing activities which tend to have a higher level of R&D expenditure – e.g. manufacture of computers, electronics and electric motors

OPDC CURRENT OVERVIEW

JOBS (2014)

Number	900
% of all jobs	2%
LQ vs London	3.2

BUSINESSES (2014)

Number	5
LQ vs London	0.3

Majority of buildings occupied are workshops or warehouses

SPATIAL REQUIREMENTS

TYPICAL USE CLASSES

TYPICAL EMPLOY. DENSITIES

B1C — 20-47 sqm

B2 — 36 sqm

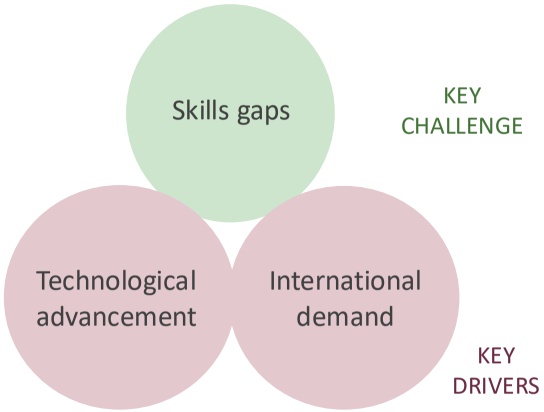
TYPICAL PREMISES TYPES

- Light industrial units; workshops; bespoke manufacturing facilities
- Typically require a larger plot with purpose built premises
- Greater need for R&D space for research
- Incubator and accelerator spaces can play an important role in developing & supporting SMEs
- Businesses show some propensity to cluster- particularly for small businesses and/or where there is a research asset

WIDER REQUIREMENTS

- Good communications and access to large and growing markets and key customers
- Quality work environment
- Often require government support
- Close proximity to universities or research institutions often important
- Firms needs to be able to attract a highly educated workforce & provide quality R&D space – need attractive neighbourhood to do this
- Close to existing skilled workforce
- Sector requires technical skills along with research skills (currently a shortage)
- The sector's higher productivity means that firms are able to afford higher rents

DRIVERS INFLUENCING DEMAND



FUTURE SECTOR PROSPECTS

- The sector is a priority for growth at the national level, and reflecting the existing manufacturing base of the area, links to local HEI and future infrastructure enhancements, there is potential for growth in the sector.

Potential for Sector Evolution

- Research and innovation – sector is continually evolving and innovating both in terms of the production process and products. Building on the existing strengths and future transport enhancements, there could be potential for the OPDC area to a more leading role in research and innovation
- Imperial White City Campus – will provide new opportunities for R&D, spin out and collaboration
- Supporting the development of the low carbon economy – potential to develop a clean tech cluster in the OPDC area has strong cross links to advanced manufacturing. A strong low carbon economy will require new processes to be embedded within existing firms, and new products and technologies to be developed. Innovation and research within the advanced manufacturing sector to help develop products and processes is an important opportunity.

OPDC Sector Locations

- More suited to industrial locations throughout Park Royal.
- The proposed Industrial Business Park on the Channel Gate site would be an ideal location given the potential to deliver bespoke new workspace in a high quality environment.

Low Carbon: Sector Summary

LOW CARBON

Sector includes manufacturing and service activities which seek to reduce carbon emissions produced during the production or consumption of a product or service

OPDC CURRENT OVERVIEW

JOBS (2014)

Number	1,300
% of all jobs	2%
LQ vs London	1.1

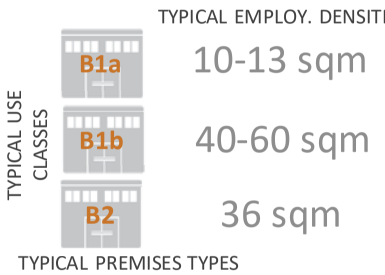
BUSINESSES (2014)

Number	<50
% of all businesses	2%
LQ vs London	0.7



Workshops, large and small warehouses

SPATIAL REQUIREMENTS

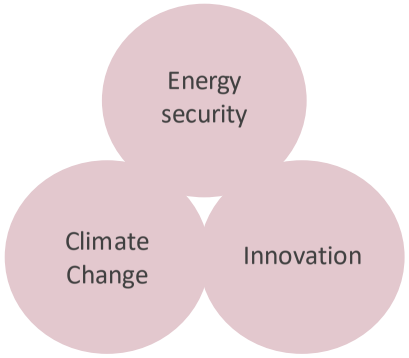


- Cuts across all sectors – from office space to industrial space
- High propensity to cluster
- R&D facilities to allow for innovation
- Mixed space for R&D and manufacturing.
- Flexible workshop space for developing firms to quickly expand operations

WIDER REQUIREMENTS

- Presence of centres of excellence and skilled labour important
- Existing manufacturing base helpful to developing sector
- Often require government support to grow cluster
- Requires good connections with local research institutions
- Close proximity to highly skilled workforce for R&D purposes
- Understanding of environmental considerations
- Competition from overseas is a challenge

DRIVERS INFLUENCING DEMAND



FUTURE SECTOR PROSPECTS

- There is potential to develop the low carbon sector locally – reflecting the energy hungry and waste intensive industrial uses taking place at Park Royal, and future scale of construction activity.

Potential for Sector Evolution

- Low carbon technologies – building on the existing manufacturing strengths, and links to HEI (Imperial West).
- Low carbon construction – the scale of development at Old Oak Common presents opportunities to delivery schemes which are exemplar in terms of their sustainable credential
- Sustainable transport – there are numerous opportunities to establish sustainable transport credential including via better use of existing asset (eg rail and water) to reduce dependence on roads, and, in the longer term, exploring the potential to test and deliver new urban transit systems.
- The circular economy (including waste and energy) – there is potential to develop a strong circular economy in the area, focusing on changing behaviour and processes in existing sectors such as food manufacturing and transport and logistics.

OPDC Sector Locations

- More suited to industrial locations throughout Park Royal. The proposed Industrial Business Park on the Channel Gate site would be an ideal location given the potential to deliver bespoke new workspace in a high quality environment.

Life Sciences Sector: Sector Summary

LIFE SCIENCES

Sector includes manufacturing and service activities which improve health care through technological advancements (e.g. new devices, medicines, vaccinations and procedures)

OPDC CURRENT OVERVIEW

Official statistics suggest the sector currently has a limited presence in the OPDC area, with:

50 JOBS

10 BUSINESSES

Despite this, the area has a number of potential strengths – including proximity to a number of existing and proposed innovation and R&D assets such as the Francis Crick Institute and Imperial West (Molecular Sciences Research Hub and the Michael Uren Biomedical Engineering Research Hub), future transport improvements and potential to deliver bespoke workspace as park of future development.

SPATIAL REQUIREMENTS

TYPICAL USE CLASS: B1b

TYPICAL EMPLOY. DENSITY: 40-60 sqm

TYPICAL PREMISES TYPES

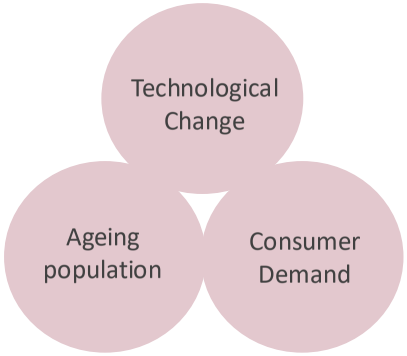
- Research facilities
- Bespoke lab space
- Universities / hospitals

- High propensity to cluster
- Shorter leases and space ranging in quality and cost
- Need for grow-on space, innovation space, space close to research base & within hospitals
- Flexible workshop space for developing firms to quickly expand operations if needed

WIDER REQUIREMENTS

- Requires good connections with local research institutions and centres of excellence - developments at Imperial White City campus present a very good opportunity to develop the sector
- Excellent infrastructure and accessibility preferred
- Highly qualified workforce for with science and technology qualifications for R&D
- Often require government support to grow cluster
- Supporting regulation and governance – high health expenditure (expected given ageing population)
- New areas of healthcare/technology to support development e.g. telecare / telehealth set to better manage people's health and support independence

DRIVERS INFUENCING DEMAND



FUTURE SECTOR PROSPECTS

- In the longer term, there may be potential for the OPDC area to capitalise on wider London sector development, proximity to hospitals and major research assets, and enhanced infrastructure.
- Presence of Central Middlesex Hospital and proximity to Hammersmith Hospital and the Imperial West campus provide significant health and research assets to build on.

Potential for Sector Evolution

- At the moment this is seen as a longer term sector opportunity, the nature of which will largely hinge on how activities develop at Imperial West and the extent to which demand emerges for spin out lab or research space, along with the wider evolution of the sector Whitechapel and Kings Cross.
- As such, the potential for local specialisation in the OPDC area should be reviewed in the coming years in partnership with Imperial, the GLA and wider partners.

OPDC Sector Locations

- Likely to be located in locations which have strong infrastructure and amenity, and in proximity to research institutions.
- The proposed Industrial Business Park on the HS2 Sites would be an ideal location given the potential to deliver bespoke new workspace in a high quality environment. Old Oak Common might also be a suitable location.

Growth Potential

xvii. Aside from sector specific drivers, there are a range of wider factors which will impact upon the scale and nature of future growth within Old Oak and Park Royal:

- Locally specific considerations include the physical capacity for growth in the OPDC area (the amount and timing of floorspace delivered), the transformational effect of the proposed transport enhancements, and the proactive planning and economic development policies of OPDC and its partners.

- Wider considerations include the overall trajectory of the UK and global economy and wider macro-economic considerations, the impact of other regeneration / development activity across London and the South East, and changes in technology and working practices. These will all impact on the growth potential at the micro level in Old Oak and Park Royal.

xviii. Taking into account these considerations, the potential scale of growth for each sector is considered in the table overleaf. The table compares a reference case scenario (based on past trends and London wide projections), to a policy on scenario which takes account of OPDC's proactive planning activities. This highlights that:

- Reflecting the type of space being delivered, the majority of growth can be expected from the office based digital, media and creative sectors, and business and professional services sectors.

- Growth in industrial sectors is likely to be much smaller in scale, and mainly linked to intensification opportunities, reflecting constraints in existing capacity in Park Royal. In the short term this is likely to be based around existing strengths (eg food and transport and logistics), albeit with potential for diversification and innovation as sectors evolve and adapt.

xix. It should be noted that our work has focused attention on the identified opportunity sectors, which are all employment (B Use Class) sectors. There are numerous other sectors which could contribute growth in future years – not least retail, leisure and hospitality. These are considered as part of separate OPDC evidence base work.

Comparison of Growth Forecasts and Aspirations

	Current Sector Size (jobs)	Policy Off Scenarios		Policy On Scenario (taking into account OPDC proactive planning policies)		
		...based on past 5 years trends across London	...based on range of employment projections[1]	Wider Considerations	Indicative Scale of Future Change for OPDC[2]	Timescales for Growth
Food Manufacturing	4,400	+900	-1,300 to -1,600	Park Royal protected as SIL – this is likely to insulate demand	Potential for growth – 500 to 1,000 jobs	2017 to 2037+
Transport & Logistics	12,900	+900	-500 to -1,800	Park Royal protected as SIL – this is likely to insulate demand	Potential for growth – 500 to 2,000 jobs	2017 to 2037+
Motor Trades	1,700	-200	-200 to -300	Park Royal protected as SIL – this is likely to insulate demand	Stable or small decline	2017 to 2027
ICT, Media & Creative	6,700	+2,000	+1,300 to +2,500	HS2, Crossrail and scale of mixed use delivery planned; step change from current context	Potential for growth – greater than 10,000 jobs	2028 to 2037+
Business & Professional Services	9,200	+1,400	+1,500 to +2,900	HS2, Crossrail and scale of mixed use delivery planned: step change from current context	Potential for growth – greater than 10,000 jobs	2028 to 2037+
Creative Manufacturing	300	0	0 to -100	Park Royal protected as SIL; proximity to HEI	Potential for growth – up to 1,000 jobs	2017 to 2037+
Advanced Manufacturing	900	-200	-200 to -500	Park Royal protected as SIL; proximity to HEI	Potential for growth – up to 1,000 jobs	2017 to 2037+
Low Carbon	1,300	Forecasts not available		Proactive planning for clean-tech cluster; activities of Imperial; development of circular economy	Nascent sector; scale of potential growth unknown at this stage	2023 to 2037+
Life sciences	50	Forecasts not available		Activities of Imperial; wider development of sector across London	Nascent sector; scale of potential growth unknown at this stage	2023 to 2037+

[1] Based on both GLA and Cambridge Econometrics employment forecasts for London, applied to current OPDC employment. The minimum and maximum range is presented.

[2] Indicative figures taking into account current scale of sector, wider growth projections, development expectations and wider macro and micro economic considerations. Intended for illustrative purposes only.

Recommendations

xx. Based on the research undertaken, there are a number of recommendation to support sector and economic development in the Old Oak and Park Royal area in the future.

Summary of Recommendations		
Theme	**Recommendation**	**Sector Focus**
Sector Development and Support	Developing sector specific **networking opportunities** and sub-groups	Existing sector strengths – food manufacturing and transport and logistics in the short term
	Exploring the need for targeted **business support** for new and established businesses	Existing sector strengths in short term; longer term focus on SMEs in opportunity sectors
	Marketing and consistent messaging to support sector competitiveness and future inward investment	Existing sector strengths in short term; longer term focus on SMEs in opportunity sectors
	Insulating Park Royal industry from land value uplift	Park Royal industrial sectors
	Developing strong **links with universities**	Opportunity sectors – ICT, Creative, Business and professional and Science and Innovation based opportunity sectors
Workspace and Place	Ensuring the **supply of employment space across the area remains diverse** (a mix of typologies and sizes) and suited to the needs of the market	Cross-cutting across all sectors
	Encouraging the delivery of a range of types of **flexible and affordable workspace** for SMEs in line with sector aspirations	Cross-cutting across all sectors
	Working with developers to ensure new space aligns with OPDCs **placemaking** aspirations, and the specific expectations and needs of target sectors and businesses	Opportunity sectors – ICT, Creative, Business and professional and Science and Innovation based opportunity sectors
	Ensure access to fast and reliable **broadband**	Particularly important for ICT, Creative, Business and professional and Science and Innovation based opportunity sectors
	Coordinated work to address **congestion** challenges	Industrial sectors – particularly transport and logistics, and food manufacturing
	Maximising **transport and accessibility** to and within OPDC area – focused both on logistics, servicing, deliveries and freight movements, but also access for employees	Cross-cutting all sectors
Skills and Social Inclusion	Developing **links with education providers** to support skill development and to maximise wider socio-economic opportunities	Opportunity sectors – ICT, Creative, Business and Professional, Advanced Manufacturing, Low Carbon and Life Sciences opportunity sectors
Strategy and Policy	Ongoing **monitoring and review** to understand performance and opportunities	Cross-cutting all sectors

1. Introduction

1.1 Regeneris Consulting was commissioned by the Old Oak and Park Royal Development Corporation (OPDC hereafter) to undertake the Old Oak and Park Royal Future Growth Sectors Employment Study.

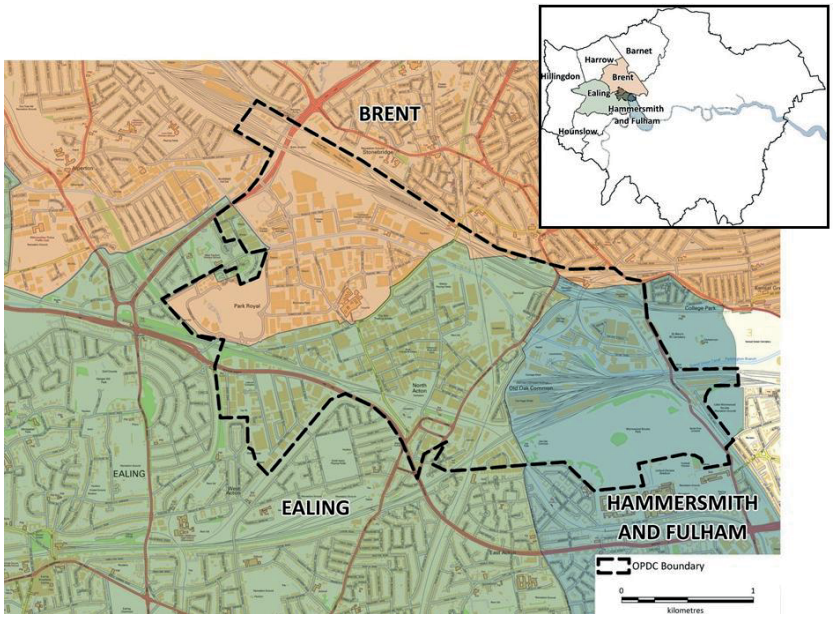
Old Oak and Park Royal Context

1.2 Old Oak and Park Royal are located across three London Boroughs in the west of London – the London Boroughs of Brent, Ealing and Hammersmith and Fulham. The area is within the wider West London Alliance sub-region, covering the Boroughs of Barnet, Brent, Ealing, Hammersmith and Fulham, Harrow, Hillingdon and Hounslow.

1.3 Park Royal is an established economic hub within London: it is London's primary industrial areas and performs a vital role in supplying London and supporting the London economy. To the east of Park Royal, Old Oak covers an area of 134 hectares[3] and is largely occupied by railway sidings and depots. Old Oak is set to be transformed in 2026 with the opening of Old Oak Common Station, which will connect Crossrail and National Rail services to the newly built High Speed 2 line, accommodating over 250,000 passengers a day.

1.4 Reflecting this context, Old Oak and Park Royal are identified as Opportunity Areas in the Mayor's London Plan (2015), with the joint capacity to deliver a minimum of 25,500 additional homes and an indicative 65,000 jobs. The majority of this will be delivered in Old Oak (24,000 homes and 55,000 jobs), making it the UK's largest regeneration project.

Figure 1.1 OPDC: Local Context Map



Source Regeneris Consulting

1.5 The Old Oak and Park Royal Development Corporation (OPDC) was established on 1st April 2015 with the aim of transforming Old Oak and Park Royal into a thriving area, taking advantage of the new transport connections offered by HS2 and Crossrail. As the local planning authority for the area, the OPDC is currently in the process of developing its Local Plan and supporting evidence base.

[3] Old Oak and Park Royal Opportunity Area Planning Framework, 2015

Study Objectives

1.6 The Old Oak and Park Royal Future Growth Sectors Employment Study was commissioned to support the OPDC in planning for, and supporting, future employment and business growth sectors in Old Oak and Park Royal. This work will form part of the evidence base for the OPDC Local Plan, inform detailed masterplanning work across the area (which is underway) and inform the contents of the Socio-Economic Regeneration Strategy (due to be developed in full during 2016 and 2017).

1.7 The objectives of the research are to:

Research Stage One

- Identify future business, economic, sector, employment, population and demographic trends and their impact on the local, sub-regional and London-wide employment context.
- Identify future growth sectors within the Old Oak and Park Royal area, and undertake a comparative assessment of their potential contribution to economic growth.
- Provide insights into the key issues impacting on these sectors, highlighting opportunities and challenges for the growth of these sectors.
- Identify the areas / places within Old Oak and Park Royal which could be attractive to each growth sector, and consider the critical success factors for these.
- Identify opportunities to cluster businesses in Old Oak and Park Royal and the steps that would need to be taken to attract such clusters.
- Identify and evaluate the impact of other large regeneration projects on the viability of employment in Old Oak and Park Royal, and the phasing of its delivery.
- Provide evidence and recommendations for policies, strategies, tactical and strategic actions to support future employment, skills development and economic growth.
- Identify how attracting, nurturing and supporting preferred employment and business growth sectors can contribute to Local Plan socio-economic policies, the Authority's Socio-economic Regeneration Strategy, and development plans.

Research Stage Two

- Undertake an initial feasibility assessment to establish the viability of Old Oak and Park Royal as a centre for a cleantech cluster

The Stage One Report

1.8 This report presents the findings of Stage One of the research:

- Chapter 2 – Policy and Strategic Context: a summary of relevant policy and strategy at the national, London and local levels.
- Chapter 3 – Profiling the OPDC Economy: a review of the structure of the OPDC economy, focusing on the recent performance, the structure of the business base and the current sector profile of the economy.
- Chapter 4 – OPDC's opportunity sectors: an introduction to the identified opportunity sectors for the OPDC area, focusing for now on current performance and characteristics.

- Chapter 5: Sector Growth Potential – analysis of projections for future economic growth, the capacity of space within the OPDC to support growth and competition elsewhere in London and the UK.
- Chapter 6 – Recommendations: overarching and sector specific recommendations to support future policy, strategy and delivery.
- Appendices – detail on a range of case studies and comparator / competitor areas for the OPDC area, technical information on our methodology, and information on consultees.

1.9 The findings from stage two of the research, a feasibility assessment to assess the viability of Old Oak and Park Royal as a centre for a cleantech cluster, accompanies this report.

2. Strategic and Policy Context

2.1 This section analyses the strategic and policy context within which this Study is framed. This includes:

- National and London level policy
- Sub-regional policy, reflecting OPDC's location within the West London Alliance Area
- Local policy relating to the Boroughs of Brent, Ealing and Hammersmith and Fulham and the OPDC itself.

Summary of Key Messages

- Old Oak and Park Royal are identified as Opportunity Areas in the London Plan; the Old Oak and Park Royal Development Corporation (OPDC) has been established as the planning authority responsible for guiding development across the area.
- The OPDC is taking a Place Based approach in developing the Local Plan, which is currently being prepared.
- The OPDC has aspirations to deliver a minimum of 24,000 homes and 55,000 jobs at Old Oak in addition to protecting, strengthening and intensifying activity within the Park Royal Industrial Estate, creating 10,000 new jobs and 1,500 new homes. This would be enabled by the delivery of between 550,000 and 600,00 sqm of additional employment floorspace across the area.
- The OPDC Industrial Land Review suggests that there is "no limit to the level of demand for space", with the area hugely attractive to businesses seeking an industrial location close to central London and intensifying pressure due to the release of industrial space across London. At the highest level, aspirations are set for employment development to be office focused in Old Oak, with Park Royal protected for industrial uses.
- The OPDC Development Capacity Study highlights the phasing of the developments, with most not scheduled to be completed until after 2026, once HS2 construction is near completion.
- The previous Mayor established aspirations for future economic growth in London, with a specific focus on securing the position of and growth in the digital and creative, low carbon, and financial and professional service sectors.
- Sector specific aspirations have also been set more locally – particularly in Hammersmith and Fulham where there are aspirations to develop strengths in tech and innovation focused sectors, building on the opportunity granted by the Imperial West development. The London Sustainable Development Commission have also undertaken initial work which has identified the potential to create a 'cleantech' cluster in the OPDC area.
- In addition to a focus on sectors, recent years have seen a strong emphasis on supporting the start-up and development of small businesses. The London LEP has an aim to make London 'the best place in the world to be an entrepreneur, whether starting up or scaling up a business'. Supporting the local small business base is also a key priority of the West London Alliance as part of a twin pronged approach (alongside reducing unemployment) to increasing productivity.

- It is important to note that the London policy context is rapidly evolving in 2016, in the context of the election of a new Mayor and the result of the EU Referendum. The new Mayor has emphasised that London is 'open for business', and in the short term, focus is likely to be placed on ensuring London retains its competitive position – across the whole economy.

National Policy Context

National Planning Policy Framework

2.2 The National Planning Policy Framework published by the Department for Communities and Local Government (DCLG) in March 2012, sets out the Government's planning policy guidance to help achieve sustainable development, targeting positive growth whilst ensuring the economic, environmental and social progress is achieved for this and future generations. It provides a framework within which local and neighbourhood plans can be developed.

2.3 The framework states that local planning authorities should positively seek opportunities to meet the development needs of the local area. To achieve this, authorities should proactively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that an area needs. In drawing up Local Plans, local planning authorities should:

- "set out a clear economic vision and strategy for their area which positively and proactively encourages sustainable economic growth;
- set criteria, or identify strategic sites, for local and inward investment to match the strategy and to meet anticipated needs over the plan period;
- support existing business sectors, taking account of whether they are expanding or contracting and, where possible, identify and plan for new or emerging sectors likely to locate in their area. Policies should be flexible enough to accommodate needs not anticipated in the plan and to allow a rapid response to changes in economic circumstances;
- plan positively for the location, promotion and expansion of clusters or networks of knowledge driven, creative or high technology industries;
- identify priority areas for economic regeneration, infrastructure provision and environmental enhancement;
- facilitate flexible working practices such as the integration of residential and commercial uses within the same unit."

National Economic Development and Industrial Strategy

2.4 The 2010-2015 Coalition Government set out a number of strategies and policies regarding economic development.

2.5 Of most pertinence was the **Industrial Strategy**[4] policy, which built on the government's Plan for Growth, the Growth Review and Lord Heseltine's report on UK Competitiveness 'No stone Unturned'. The Industrial Strategy set out a long-term, "whole-of government" approach to

[4] https://www.gov.uk/government/publications/2010-to-2015-government-policy-industrial-strategy/2010-to-2015-government-policy-industrial-strategy

support economic growth, underpinned by a new partnership between business and all parts of government.

2.6 There were five main strands to Industrial Strategy:

- Skills – working in partnership with business to deliver the skills that employers need through more direct control of how government funding on skills is spent.
- Technologies – investing in eight great technologies where the UK has the research expertise and business capability to become a world leader in big data, space, robotics and autonomous systems, synthetic biology, regenerative medicine, agri-science, advanced materials and energy
- Access to finance – creating the British Business Bank, to help remove barriers to the supply of business finance, helping smaller businesses grow by investing in people and equipment.
- Government procurement – letting businesses know in advance what Government is planning to buy so that they can invest in the right skills and equipment to make the most of these opportunities.
- Sectors – providing support for all sectors of the economy to help increase global competitiveness, support innovation and maximise export potential. Strategic partnerships have been developed in sectors where government and business, working together, believe they can make the most difference. The identified sectors are aerospace, agricultural technologies, automotive, construction, information economy, international education, life sciences, nuclear, offshore wind, oil and gas, and professional and business services.

2.7 In summer 2015, a new Conservative Government was elected and the Chancellor announced a new focus taking action to address the UK's productivity gap. **"Fixing the foundations: Creating a more prosperous nation"**[5] sets out a 15-point plan that the government will put into action to boost the UK's productivity growth, centred around two key pillars: encouraging long-term investment, and promoting a dynamic economy. The actions points focus around skills, infrastructure innovation in helping to generate sustainable and higher value economic growth. Priorities include:

- Securing a highly skilled workforce, with employers in the driving seat;
- World-leading universities, open to all who can benefit;
- A modern transport system, with a secure future;
- Reliable and low-carbon energy, at a price we can afford;
- World-class digital infrastructure in every part of the UK;
- High quality science and innovation, spreading fast;
- A dynamic economy;
- A higher pay, lower welfare society;
- More people with a chance to work and progress;
- Financial services that lead the world in investing for growth;
- Open and competitive markets with the minimum of regulation;

[5] HM Treasury 2015 Fixing the foundations: Creating a more prosperous nation, accessed at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/443898/Productivity_Plan_web.pdf

- A trading nation open to international investment; and
- Resurgent cities, a rebalanced economy and a thriving Northern Powerhouse.

2.8 It is too early to say how government policy will evolve in light of the 2016 EU Referendum and subsequent political changes. However, with the creation of a new department for Business, Energy and Industrial Strategy, the early signs are that there may be a renewed focus on Industrial Strategy by the current government. Early speeches indicate that the Industrial Strategy will focus on raising productivity, renewing a commitment to infrastructure projects (such as the north-south HS2 railway), more house-building, a regional policy, and a continued focus on growth sectors.

London Policy Context

London's Evolving Policy Context

While the below documents remain the most up to date policy and strategic position of the GLA, the strategic context is evolving in 2016 due both to the election of a new Mayor, and also due to the fall-out of the EU Referendum result.

Consultation with GLA officers has highlighted that a new Economic Strategy for London is under development and anticipated for publication in 2017.

In response to the Brexit vote in June 2016, the new Mayor has been quick to emphasise that London is 'Open for Business': the projection adverse economic impact of Brexit means that the short term focus is likely to be on retaining and strengthening activity across the economy, in contrast to the more sector led / sector specific approach of recent years.

While it is still early days, a continuing focus is expected to be placed on SMEs – continuing the focus of recent years on open workspace but also exploring the potential to deliver more bespoke support in future years. The new Mayor has also emphasised that previous sector priorities such as creative industries will continue to be a priority. Significant focus is also being placed on examining and mitigating the potential future workforce effects of Brexit on sectors such as construction, hospitality, health and care, and digital.

The new Mayor has also emphasised an increased focus on social inclusion which is likely to be at the forefront of GLA economic development activities over the coming years.

London Plan (updated 2016)

2.9 The London Plan, most recently updated in March 2016, sets out the overall development strategy for London, setting out an integrated economic, environmental, transport and social framework for the development of London over the next 20–25 years. Economic development and wealth creation is one of the three cross-cutting themes in the London Plan.

2.10 As part of these aspirations, 38 opportunity areas were established across London. These are areas which have significant capacity for development (such as housing and commercial uses) alongside those with existing or soon to be improved public transport access. Old Oak and Park Royal are amongst the Opportunity Areas identified in the London Plan.

2.11 Policy 2.13 of the London Plan, states that the Mayor will provide proactive encouragement, support and leadership for partnerships preparing and implementing opportunity area planning frameworks. In terms of decision making, development proposals within opportunity and intensification areas should:

- 'seek to optimise residential and non-residential output and densities, provide necessary social and other infrastructure to sustain growth, and, where appropriate, contain a mix of uses
- contain a mix of uses, contribute towards meeting the minimum guidelines for housing and employment realise scope for intensification associated with existing or proposed improvements in public transport accessibility
- support wider regeneration and integrate development proposals to the surrounding areas.'

2.12 In wider economic terms, the London Plan encourages broad-based growth. It continues to support the success of long standing economic sectors such as financial and business services which position London globally, whilst also prioritising the leisure services and retail sectors which underpin London's attractiveness as a place to live and work and visit.

2.13 In addition to this, there is a focus on helping to build the conditions for new sectors to emerge, such as the technology, media and telecommunications sectors which can help enhance London's position as a thriving, resilient and diverse city economy. The London Plan also notes a commitment to driving a fundamental shift in London's economy towards a low carbon future, with economic growth and business success coexisting to reduce carbon intensity.

2.14 Policy 2.17 of the London Plan identifies the strategic industrial locations (SIL) which is London's main reservoir of industrial land comprising approximately 50% of London's total supply. This is where borough and other stakeholder should promote, manage and protect industrial land for the purpose of industrial land uses and relate capacity including general and light industrial uses, logistics, waste management and environmental industries (such as renewable energy generation), utilities, wholesale markets and some transport functions. Park Royal is identified as a SIL, and is further identified as a preferred industrial location (PIL) and an industrial business park (IBP).

Old Oak and Park Royal Opportunity Area Planning Framework (2015)

2.15 Adopted in November 2015, the Old Oak and Park Royal Opportunity Area Planning Framework (OAPF) provides supplementary detail to the planning policies within the London Plan. It suggests how Old Oak could evolve and change over the coming decades, and how Park Royal could be regenerated to ensure the whole Opportunity Area reaches its development potential.

2.16 The OAPF anticipates that a large portion of new employment opportunities in Old Oak will be provided in new office and commercial space with the majority of this space located within walking distance of the new Old Oak Common station and other new London Overground stations. Opportunities should be provided for some smaller scale office space, particularly catering for SMEs. In addition, Old Oak should seek to secure a range of different employment opportunities, such as using employment space for artists' studios and flexible workspaces.

2.17 Large employment generating proposals in Old Oak will need to investigated and explain how their development will complement the potential to accommodate newly emerging employment growth sectors.

The Mayor's Economic Development Strategy (2010)

2.18 The Mayor's Economic Development Strategy (2010) sets out ambitions for London to be the best large city in the world, with London expanding opportunities for all its people and enterprises, achieving the highest environmental standards and quality of life, and leading the world in its approach to tackling the urban challenges of the 21st century, particularly that of climate change.

2.19 To help achieve this goal, the strategy highlights the importance of promoting London's existing strengths in business, tourism, learning and creativity, whilst transforming into a low carbon economy and remaining globally competitive in doing so. Supporting the low carbon economy is an important focus, with London positioning itself as a leading low carbon capital for the provision of finance, business services and innovation within the global low carbon economy. London has a target to reduce its CO_2 emissions by 60% by 2025, which will provide a greater market for low carbon products and services.

London 2036: An Agenda for Jobs and Growth (2015)

2.20 The London LEP is the local enterprise partnership for London, chaired by the Mayor of London, and is the body through which the Mayoralty works with London's boroughs, business and Transport for London to take a strategic view of the regeneration, employment and skills agenda for London.

2.21 The London LEP's **London 2036: An Agenda for Jobs and Growth** sets out its ambitions to maximise job creation and economic growth in the capital as well as increasing the diversity and resilience of London's business base.

2.22 It lists a number of priorities which will help to drive London's economic performance. One of these is to help diversify and strengthen the economy, and London LEP has identified the digital and creative, low carbon, finance and professional service sectors as key sectors in the future of London's economy.

London Industrial Land Supply and Economy Study, GLA, 2015

2.23 Recent years have seen increasing pressure on the supply of industrial land in London. A combination of factors including increasing land values (residential land values are now typically 3 times higher than industrial) and the challenge of identifying additional land for housing have resulted in the 'chipping away' of strategic employment land – both on an ad hoc and more strategic basis.

2.24 The London Industrial Land Supply and Economy Study (2015) highlights this trend: the trend rate of release of industrial land for 2010 to 2015 is 105 ha per annum: almost 3 times the London Plan/ SPG recommended rate of release of 36.6 ha per annum. If the London-wide trends continue then the total stock of industrial land in London will decline by a further 33% over the period to 2041.

2.25 The study concludes that "*if sufficient industrial land can be provided / protected within and around London, continued release of industrial land in London may be possible. However, the rates of release seen over the last five years appear to be excessive and a more cautious rate of release is probably more appropriate*".

2.26 The study notes that given that activities located in industrial areas are increasingly associated with servicing the rest of London's economy and population, and given project population increases, at some point, in the future there will be a case to switch from releasing industrial land to retaining most of the remaining land.

2.27 The study notes that care is needed at a local level to be clear on what industry is being protected and to ensure that policies are sufficiently robust and unambiguous, and then are protected with vigour, to reduce the potential for blight, hope values and issues over bad neighbour activities with other sensitive land uses damaging industrial activities and viability.

Implications for OPDC. A number of priority sectors for future growth have been established at the London level, which present potential opportunities for OPDC. These include: technology, media and telecommunications, creative industries, advanced manufacturing / engineering,

financial and professional services and the low carbon economy (including finance, business services and innovation). Support for SME and enterprise is also a key priority of relevance. The London LEP's Agenda for Jobs and Growth has a strong emphasis on supporting the start-up and development of small businesses. It has an aim to make London 'the best place in the world to be an entrepreneur, whether starting up or scaling up a business'. Reflecting the above, over the past two years, the GLA has placed a large amount of focus on 'places of work' and open workspace (defined to include incubators, accelerators, co-working spaces, artists' workspace and makerspaces), and in particular ensuring the supply of workspace matches demand in town centre, industrial areas and new developments.

Given the pressure on industrial land elsewhere in London, Park Royal has an ever increasingly important role to play in accommodating industries serving the London economy and population.

Sub-Regional Policy Context

2.28 As noted previously, the OPDC is situated within the West London Alliance Area and is situated across three Boroughs – Brent, Ealing and Hammersmith and Fulham. The West London Alliance area covers all three of these boroughs in addition to Barnet, Harrow, Hillingdon and Hounslow.

West London Vision for Growth (2014)

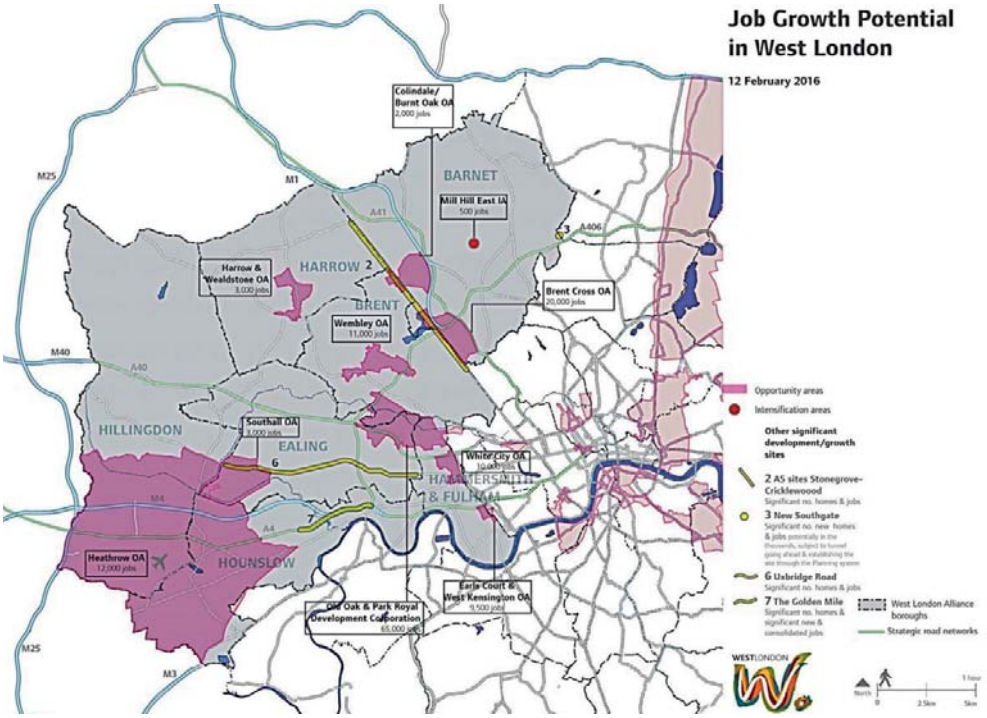
2.29 The West London Vision for Growth sets out the Alliance's visions for West London and how to ensure the area is able to take full advantage of the opportunities presented by London's economic growth now and in the future. Six key objectives have emerged from this vision, including:

- To increase small business start-up and survival rates through business support hubs, higher exports and focused collaboration with higher education institutions.
- To deliver at least 71,000 homes as part of a housing programme that meets the needs of our residents and supports growth.
- To create and maintain thriving town centres which are hubs for work and living.

2.30 The West London Alliance does not have any particular sector aspirations, but rather a focus on sectors which will provide good levels employment for local people, rather than being in capital intensive sectors which take up large sites and deliver low levels of employment.

2.31 Vision maps have been created to highlight some of the key collective ambitions of the West London Alliance boroughs, including ambitions on housing, jobs and transport infrastructure. The jobs growth potential map is shown below, showing the location of key future employment sites for the future across West London.

Figure 2.1 West London Alliance Employment Vision Map



Source: West London Alliance, 2016

West London Economic Assessment (2016)

2.32 The West London Economic Assessment provides a local economic assessment for West London looking at the macro trends across London, and a review of West London's current economic performance which would help inform the West London Economic Prosperity Board in delivering future policy. Note that West London analysis is picked up in other chapters of this report.

2.33 The assessment identifies a number of potential risks to the West London economy over the next few years. The two most relevant of these is that West London could be become "a victim of its own success" with high external costs of growth (such as transport congestion and housing costs) and that West London fails to stay flexible and innovative, becoming over-dependent on certain products or technologies.

2.34 To mitigate against these potential risks, it is important that West London invests in the capacity needed to cope with rapid growth and maximise the ability of the economy to adapt in the face of what is likely to be very rapid growth in West London. This includes improvements in housing provision, employment and transport infrastructure.

Implications for OPDC. The need to understand and acknowledge the strategic aspirations and regeneration and development activity of partners across the sub-region and the impact that these might have on overall economic demand and sector development in the OPDC area. Supporting the local small business base is also a key priority of the West London Alliance as part of a twin pronged approach (alongside reducing unemployment) to increasing productivity.

OPDC Local Plan and Evidence Base

2.35 As the formal planning authority for the Old Oak and Park Royal area, the OPDC is currently in the process of developing its formal Local Plan and supporting evidence base.

2.36 While the evidence base is still emerging, many of the key documents are now in draft form; key messages are summarised below.

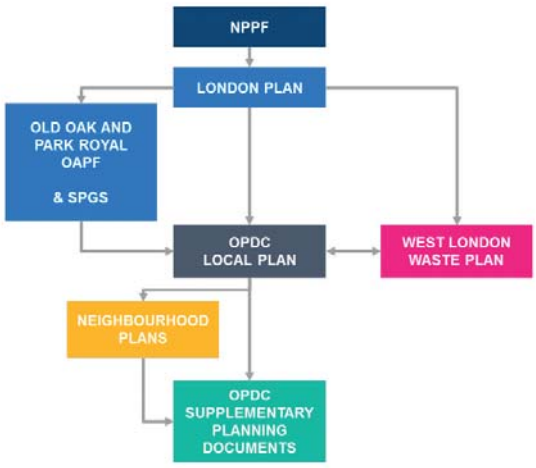
OPDC Draft Local Plan (2016)

2.37 As a Local Planning Authority OPDC has a duty to prepare a Local Plan, setting out the strategy for development within the area and the policies that will be used to direct development and determine applications across the entire OPDC area. A Draft Version of the Local Plan was produced in February 2016, with further consultation expected in 2017.

There is over 135 hectares of developable land in Old Oak which provides a substantial opportunity for development and regeneration. The OPDC plans to work with stakeholders to ensure that it optimises the delivery of new homes and jobs, supporting the regeneration of the area and establishing a new destination that will shape west London's economy and supports London's role as a global city. To achieve this, the OPDC plans to deliver a minimum 24,000 homes and 55,000 jobs at Old Oak, in addition to protecting, strengthening and intensifying the Park Royal Industrial Estate in order to accommodate 10,000 new jobs and 1,500 new homes.

2.38 The OPDC aims to promote Old Oak and Park Royal as a place for enterprise and innovation by establishing Old Oak as a recognised commercial hub and consolidating Park Royal's position as London's primary Strategic Industrial Location (SIL). Old Oak is expected to become a mixed-use employment hub with a range of commercial areas and town centre uses, which will generate employment across a range of sectors.

Figure 2.2 Policy Status and relationship



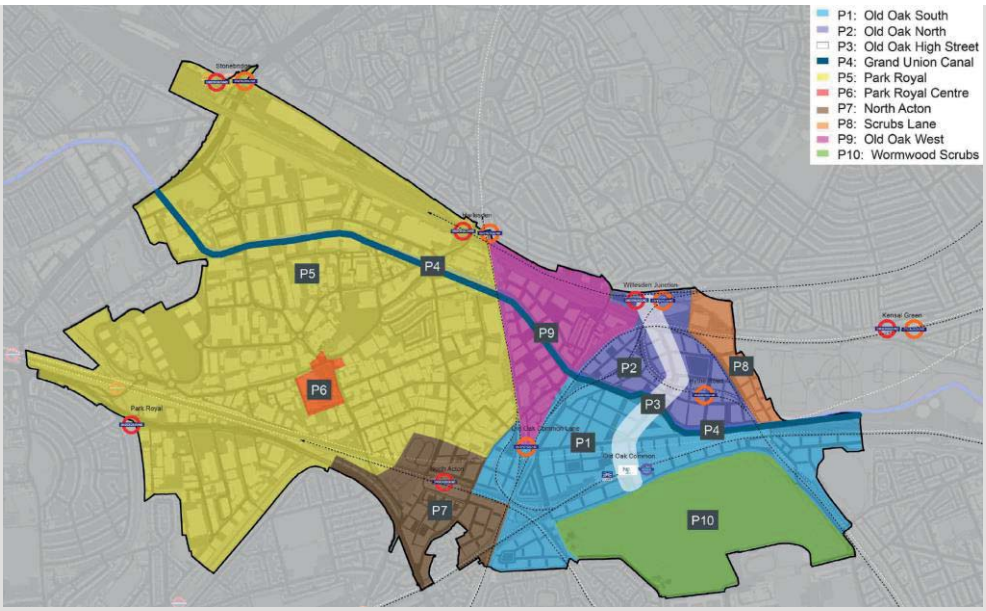
Source: OPDC Local Plan, 2016

2.39 Although there are no specific sector aspirations within the Draft Local Plan, there is an emphasis on open workspace which could accommodate a range of SME businesses, especially those in the digital, creative, cultural, life sciences, applied sciences, clean, green and low carbon technology and the circular economy. This is further reflected in the draft OPDC Industrial Land Review. Open workspace typologies will be supported by protecting existing providers, and by requiring proposals for major commercial development to deliver affordable workspace.

A Place Based Approach

Within its emerging Local Plan and supporting evidence base, OPDC is adopting a highly spatial and place based approach to development.

To ensure that new development delivers a strong sense of place, the Draft Local Plan focuses on ten places within the OPDC area, each of which have their own character and varying development aspirations. While these places may be subject to change as the next version of the Local Plan is developed, they remain helpful in giving a sense of the spatial differentiation within the OPDC area.



Source: OPDC Draft Local Plan

OPDC Socio-Economic Baseline

2.40 While not a strategy or policy document, the Socio-Economic Baseline for Old Oak and Park Royal (Working Paper 74), was produced in March 2016 by GLA Economics to understand the socio-economic characteristics of the area. This includes a number of geographical, community, population, transport, housing, business and employment statistics.

2.41 Generally, the socio-economic measures of the area indicate that when compared to Greater London, the area is disadvantaged across a number of different indicators. Some of this performance can be attributed, at least in part, to the population of the area being younger than the overall London population, with residents up to the age of 30 accounting for 5.3% points more of the population when compared to London as a whole.

2.42 Local residents in Old Oak and Park Royal are generally low earners than elsewhere in London. Household incomes in the area are lower by around one-quarter when compared to London wide incomes despite having experienced similar growth in incomes since the economic downturn. This is consistent with lower rates of economic activity, and higher rates of unemployment across most different demographic groups that live in the area. Long-term unemployment is also more common, resulting in a higher share of the population claiming benefits through Job Seekers Allowance or Universal Credit.

2.43 The labour force in Old Oak and Park Royal is generally less educated compared to London. Levels of education tend to be below London averages in terms of both results for students still in school, and the level of qualifications that have been obtained for the working-age population.

2.44 There is greater access to transport in the area when compared to the average across London, which largely reflects the number of stations in the area, with journeys into the area on the Underground or Overground more common than journeys leaving the area.

2.45 Over a third of land within the Old Oak Park Royal development zone is designated for manufacturing use alone. It is estimated the area generated £2.58 billion worth of economic activity in 2012, predominantly driven by industries, such as information and communication, wholesale and retail trade, and manufacturing.

2.46 The OPDC Sectors Study builds upon the findings made in the Socio-Economic Baseline and dives deeper into the data to gain a better understanding of the sectors in Old Oak and Park Royal and how these are expected to develop in the future. This will help to inform the Socio-economic Strategy (see below).

OPDC Draft Outline Socio-Economic Regeneration Strategy (2016)

2.47 The draft Outline Socio-Economic Strategy sets out a direction of travel for how OPDC will define a bold, long-term vision for Old Oak and Park Royal, focusing on the role the area will play in London's future growth and economy, and how OPDC will harness the major transport investment to secure maximum regeneration benefits for the capital and the local area.

2.48 Objectives in the Strategy include ambitions to:

- Establish a new centre within London at Old Oak;
- Deliver a new commercial centre for London's economy;
- Protect and enhance Park Royal's position by addressing barriers to growth and delivering intensification;
- Create opportunities for education and skills development; and
- Promote good health and well-being in order to reduce health inequality.

Implications for OPDC. The sectors have an important role to play in supporting OPDC's wider socio-economic aspirations, particularly aspirations around strengthening existing industries in the area, supporting a range of economic opportunities, including high value growth, in order to provide additional jobs, training and skill opportunities, for existing communities.

OPDC Industrial Land Review (2016)

2.49 The ILR examines the supply and demand for industrial land within the OPDC area. It identifies 355ha of employment sites which accommodate around 1,500 business units in diverse sectors. With regard to demand, it concludes that there is no limit to the demand for industrial uses in Old Oak and Park Royal. In addition to this, supply is being constrained in the three boroughs within which Old Oak and Park Royal is located, with the boroughs' industrial land allocations having a slow churn rate, or being converted into mixed-use developments at a faster rate than expected. This has led to low vacancy rates, rising rental levels and low investment yields.

2.50 To improve the supply of industrial land, one of the core recommendations is the need for **intensification** of sites, especially in Park Royal, given the limited supply of vacant industrial employment land (at 2%). This might include developing multi-storey warehouses and using multi-storey car parks (or roof top car parks) to free up more space for developments.

2.51 The ILR notes that Park Royal is one of the few locations in London able to accommodate larger industrial uses. It acknowledges that while HS2 and Crossrail provide a strategic development opportunity in Old Oak, the release of industrial land in Old Oak and the construction sites for HS2 will exacerbate the shortage of industrial land in the area.

2.52 Based on how they will be affected by HS2 and Old Oak redevelopment boundaries, the employment sites have been split into four groups:

- In Old Oak, it is expected that industrial land will be released to enable higher density development around new transport nodes. However, there is scope to retain some existing light industrial and office business activities and some industrial buildings in Park Royal, if

they add character to the area. In order to meet the 55,000 new jobs expected at Old Oak, the majority of jobs would be included in use classes which are fully compatible with high density residential (i.e. broadly A, B1 & D Classes). The only compatible industrial use would be light B1(c) space, however this space would not have high demand due to the need for internal lifts for deliveries etc.

- In the Park Royal SIL sites, all sites to continue to be protected as a Strategic Industrial location. It is expected that the shortage of industrial land in West London will lead to the intensification of floorspace, especially across warehousing and industrial uses (as opposed to utilities and waste uses).
- Park Royal non-SIL employment sites – these sites will continue to complement the SIL uses however their redevelopment should be controlled and a small number of specific sites designated as SIL to protect current and adjacent SIL uses.
- The Park Royal HS2 sites (referred to as Channel Gate elsewhere in this report) would be required until 2026 to facilitate the HS2 works, and would need to be vacated in the short to medium term. Once these are released, then there are two potential scenarios which could develop:
  - The sites return to previous industrial uses, with a specific appeal to the growing logistics and modern manufacturing market that cannot be easily re-accommodated on local quality sites. This suggests redevelopment as a Preferred Industrial Location; much like the Park Royal SIL.
  - There may be scope to increase the number of jobs if higher density employment was promoted, with the sites classified as Industrial Business Park (IBP) land as opposed to Preferred Industrial Land (PIL). This would seek to attract activities such as "research and development (B1b), light industrial (B1c) and high value-added general industrial (B2)". This could act as a buffer use between Old Oak and the main Park Royal SIL. The intensity of this space would be denser than warehousing and logistics activities, but less dense than office space.

2.53 Projected supply of space across these sites is summarised overleaf.

Table 2.1 Industrial / Non-Industrial Floorspace Scenarios **Net Change**

			Site Area (ha)	Floorspace (sqm)	Jobs	Reason
Old Oak		**Industrial**	-82.6	-376,530	-5,287	Land released for mixed use
		Non-Industrial	82.3	750,093	54,338	
		All Uses	0	373,563	49,052	
Park Royal SIL		**Industrial**	0	113,909	4,216	Intensification
		Non-Industrial	0	0	0	
		All Uses	0	113,909	4,216	
Option 1	**Park Royal HS2 Sites**	**Industrial**	0	58,525	1,658	Intensification
		Non-Industrial	0	0	0	
		All Uses	0	58,525	1,658	
Option 2	**HS2 Sites Industrial Business Park**	**Industrial**	0	124,187	7,575	Intensification
		Non-Industrial	0	0	0	
		All Uses	0	124,187	7,575	
Total	**HS2 Sites Option 1**	**ALL USES**	0	318,178	54,925	

	HS2 Sites Option 2	**ALL USES**	0	383,841	60,843	

Source: OPDC Industrial Land Review

2.54 Recommendations are split into four groups:

- Protect - focus on protecting industrial uses in Park Royal SIL;
- Intensify - improve the efficiency of industrial land uses in Park Royal;
- Expand - expand the industrial space by refocusing boundaries and providing light industrial floorspace in Old Oak; and
- Support - supporting the existing industrial business base to stay and grow including via relocation support, low carbon transition support and local procurement support.

Implications for OPDC. The findings of the Industrial Land Review have clear implications for the Sectors Study both in terms of its conclusions on the strong level of demand for industrial land in Park Royal and in its projections for future floorspace and employment in both Park Royal and Old Oak. These findings on supply establish the quantum and type of land available for industrial and non- industrial uses, which to a large extent defines the types of activities and sectors able to be located in different part of the area. This is considered in more detail in chapter 5.

The Industrial Land Review also highlights the future potential to create an Industrial Business Park on Park Royal HS2 sites (Channel Gate), defined as "research and development (B1b), light industrial (B1c) and high value-added general industrial (B2).

OPDC Development Capacity Study (2016)

2.55 The draft Development Capacity (2016) Study builds on the Industrial Land Review to provide more detail on where expected employment and homes will be located within Old Oak and Park Royal, and how these will be phased. It seeks to demonstrate how the Local Plan could deliver the London Plan minimum housing targets and indicative employment capacity for the area.

2.56 In line with the Old Oak OAPF, it is anticipated that the majority of office floorspace, including open workspace typologies, is to be focused at and around Old Oak Common Station and other locations adjacent to North Acton Station, Willesden Junction Station, Hythe Road Station and along Old Oak High Street and Scrubs Lane. Allied to the recommendations of the ILR, the bulk of Park Royal is identified for intensification.

2.57 Quantitative detail on the anticipated phasing of employment and homes is summarised in the table below.

Table 2.2 Phasing of New Homes and Jobs in the OPDC Area

Phase			**New homes**	**New jobs**
Phase 1	1 - 5 years	2017 – 2021	2,200	1,500
Phase 2	6 - 20 years	2022 – 2037	19,800	59,500
Phase 3	20+ years	2037 +	4,000	Marginal

Source: OPDC Draft Development Capacity Study, 2016

2.58 Further detail on the phasing of specific sites within Old Oak is provided in the map and tables below, but further work is underway to update this.

Figure 2.3 Development Sites in Old Oak



Source: OPDC Draft Development Capacity Study, 2016

Table 2.3 Old Oak Sites Capacity and Phasing

ID	Name	Size (ha)	Office F /space sqm	Retail F /space sqm	Estimated Jobs	Phasing
1a	Portal Way (a)	37	11,500	0	1000	1 & 2
1b	Portal Way (b)	6	2,300	0	200	2
2	Perfume Factory	51	11,500	0	1000	1 & 2
3	North Acton Station	13	1,150	4,860	400	2
4	Island	20	0	0	0	n/a
5	Brunel Road	59	0	0	0	n/a
6	Shield (HS2)	49	1,150	0	100	2
7	Willesden Junction Station	47	21,850	2,556	2000	2
8	Car Giant E&W	100	9,200	7,686	1200	2
9	Scrubs Lane E	12	3,450	0	300	1 & 2
10	Scrubs Lane W	30	11,500	0	1000	2
11a	LBHF owned site	6.6	6,900	0	600	2
11b	Car Giant North	59	9,200	7,686	1200	2
12	EMR	33	34,500	2,556	3100	2
13	Powerday	42	0	0	0	n/a
14	Genesis (Oaklands)	24	0	0	0	n/a
15	Depot	140	230,000	15,354	20,000	2
16	HS2 Station Site	129	299,000	15,354	26,000	2
17	IEP Depot	72	0	0	0	n/a
18	Mitre Bridge	37	0	0	0	n/a
19	North pole east	24	0	0	0	n/a

A	Harrow Road	13	6,900	0	600	2
B	Old Oak Common Lane site	0.8	0	0	0	n/a
C	Sword Site	25	8,050	0	700	2
D	North Action Station OSD	5	3,450	0	300	2
E	Portal Way east	0.2	1,150	0	10	1
	Totals	1,035	672,750	56,052	59,710	

Source: OPDC Development Capacity Study, 2016
Note: Phasing 1 = 2017-2021, 2= 2022-2037, 3= 2037+

Implications for OPDC. Like the Industrial Land Review, the Development Capacity Study has clear implications for the Sectors Study in its projections for future floorspace and employment in the OPDC area, and the indicative phasing of this. These findings also indicate which types of activities might be suitable on individual development sites. This is considered in more detail in chapter 5.

Other relevant OPDC Evidence Base documents

2.59 As part of the Local Plan development process, a detailed evidence base is in the process of being formulated. The documents relevant to this study are summarised in the table below and where relevant the findings from these are referenced in other chapters. It should be noted that a number of these strategies – such as the Circular Economy Study and SMART Strategy have the potential to contribute in terms of sector development.

Table 2.4 Other Evidence Base Documents of Relevance to the Study

Document	Brief Summary of Contents
Park Royal Atlas	• The Atlas sought to provide more detail on the businesses located in Park Royal to better understand the characteristics of the local economy and how they could be supported in the future to meet the intensification needs of Park Royal in the future. It used a combination of quantitative and qualitative research to provide more detail than official statistics could provide. • The study identified 2,150 workplaces, of which 1,934 were active and of those the names and activities of 1,717 could be identified. It found that many workplaces in the manufacturing, wholesale and storage and transport sectors required large building footprints. Many of these were involved in the manufacturing and wholesale of food.
OPDC Industrial Estates Research	• The draft Industrial Estates Research study examines how Park Royal performs relative to six comparator industrial estates in the UK. • The research makes recommendations based on the experiences of other industrial estates and how competitive Park Royal is relative to these and will be used to inform the Park Royal Industrial Estate Business Plan. • Key findings of relevance include: access to infrastructure such as energy, water and broadband could become a real limiting factor which hinders intensification and growth at Park Royal and this should be addressed; the issue of congestion was also identified as a major weakness; OPDC should help to ensure a diversity of unit sizes to allow a range of businesses to locate at Park Royal; a BID (or something similar) could help to address some of the issues at Park Royal such as crime and public realm issues; there are lower productivity levels (per worker) at Park Royal compared to other sites and OPDC could investigate the potential to attract higher value added uses such as advanced manufacturing;
OPDC Retail & Leisure	• Provides evidence on the magnitude of need for retail and leisure uses within the OPDC area over the next 20 years.

Needs Study	• There is a quantitative need for additional A-class uses in the OPDC area in the Local Plan period (the next 20 years). The majority of this should be provided in the new Old Oak High Street Major Centre and the remainder in North Acton and Park Royal neighbourhood centres. • Balance will need to be maintained between retail units serving the needs of resident and workplace population.
OPDC Development Infrastructure Funding Study	• This study identifies the infrastructure requirements of growth at Old Oak, when these demands will arise, how much they will cost and how infrastructure improvements might be paid for. • The report identifies the need for over £1.5 billion in infrastructure investment to support the developments at Old Oak. CIL and S106 contributions can go some way in meeting this, however other means of funding will need to be investigated. 12 'big ticket' projects account for around £1 billion of these costs, and this includes two new London Overground stations, a Crossrail spur to the West Coast Main Line and a heat and power network. • There are significant cash flow issues (especially until 2025) which need to be resolved and the phasing of infrastructure may need to be reconsidered. This is largely due to the high initial cost of infrastructure investment required before significant housing can be built in Old Oak
OPDC Catalyst Uses Study	• The Catalyst Uses study is currently under development and is examining the other uses which could be encouraged to locate on key sites, in order to establish Old Oak as a new London destination.
Circular Economy Study	• The Circular Economy study has been commissioned to explore the potential to grow and develop the Circular Economy across the OPDC area. This emphasises the principles of reuse and recycle and could encourage associated sector development.
Old Oak Common Energy Strategy	• The Energy strategy shows the potential for a Decentralised Energy Heat network to supply low or zero carbon heat to more than 24,000 new homes as part of the redevelopment of the Old Oak Common area. • This would initially be accommodated within three energy centre buildings which could be consolidated into a single energy centre by 2031.
OPDC SMART Strategy	• Urban regeneration and development projects present an excellent opportunity to reconsider and implement policies, processes and technologies that can contribute to climate change mitigation and adaptation and create sustainable environments. • Old Oak and Park Royal could achieve this through interventions to transport, public realm, utilities infrastructure and smart sustainability. The implementation of this Strategy could encourage associated sector development.
Cultural Principles Strategy	• The cultural strategy explores ways of developing a creative talent pipeline for Old Oak and Park Royal to help foster the cultural economy. • It encourages 'anchor' tenants and cultural institutions to locate in the area, and explore options for attracting and retaining creative businesses and affordable workspace.

Implications for OPDC. While no specific sector aspirations have been outlined to date for the OPDC area, there are a number of strands of work ongoing which provide synergies in terms of sector development and which have the potential to influence economic structure in the future. These include the SMART Strategy and the Circular Economy studies. The following opportunities related to 'clean tech' and the 'circular economy' have been identified for the OPDC area:

- Cleantech – The London Sustainable Development Commission was established in 2002 to advise the Mayor of London on making London a 'sustainable world city'. In their "Better Future: A Route Map to Creating a Cleantech Cluster in London", LSDC has subsequently identified the potential to create a 'Cleantech Cluster' at Old Oak and Park Royal (OOPR). In

this context, cleantech usually refers to technology for low-carbon, renewable energy and covers technologies that address the causes and effects of climate change via: low-carbon energy, energy and resource efficiency, system efficiency, climate change resilience and greenhouse gas removal. OPDC and the neighbouring Imperial White City (IWC) development are identified as a unique opportunity for creating a world-leading cleantech cluster given that OPDC is Europe's largest urban development with sustainability written into its vision, IWC will become a world leading research and innovation campus, Imperial College London and Climate-KIC UK are world leaders in Cleantech start-up creation and that OPDC will be in the midst of the best communications and transportation infrastructure in the UK. *The OPDC Cleantech Cluster Feasibility Study, undertaken alongside this report, explores this in more detail.*

- Circular economy – OPDC is also currently working with the London Waste and Recycling Board (LWARB) to explore the potential to develop and maximise potential relating to London's circular economy. In the London Infrastructure Plan 2050, an ambition is stated that London becomes a world leader in the development of the circular economy. LWARB has subsequently been exploring this further: 'Towards a circular economy – context and opportunities' report, identifies five areas for initial focus: the built environment, electricals, textiles, food and plastics. LWARB also identifies the value of working to embed circular economy principles in the 38 opportunity areas identified through the London Plan.

Borough Policy Context

2.60 Key strategies and policies of relevance from each of the three OPDC local authorities are introduced below.

Table 2.5 Relevant Local Policy Documents

London Borough of Brent	
Local Plan, Adopted 2010	• Sets out the council's spatial vision for Brent to 2026 and outlines key planning policies. • Future development in Brent will be focused in 5 Growth Areas (of which Park Royal is one). • The Plan seeks to ensure there are sufficient sites and premises in Park Royal and that industrial space is renewed. • It aims to promote the arts and creative industries through increased supply of modern subsidised workplace developments
Regeneration Strategy for Brent 2010-2030	• Looks to reduce poverty and inequality though regeneration and economic development, building on the success of recent developments in the borough (e.g. Wembley Stadium). • Highlights a commitment to increasing employment and income levels, especially to those most in need. • Aims to maximise investment in Brent from all sectors to deliver transformational change across the borough.
Employment, Skills and Enterprise Strategy 2015-20	• A strategy which aims to co-ordinate partners to tackle unemployment, poverty and social exclusion. • Aims to promote economic growth through regeneration and ensure that local education and skills provisions meets the demands of the labour market. • Brent needs to influence growth and investment opportunities at Old Oak to ensure local people can access opportunities.

	• Council will address inequality to reduce economic and social polarisation amongst those in the most deprived neighbourhoods and furthest away from work.
Employment Land Demand Study, 2013	• Decreasing demand for industrial land due to declining employment projections in industrial sectors (-18 to -23.7ha between 2013 and 2029). • Increasing demand for office space due to rising employment projections in relevant sectors (between 33,300 m2 and 52,495 m2 up to 2029). • To meet these targets, some industrial land needs to be re-designated or released to office land. In addition, there needs to be more affordable start up space and work/live units to help meet office space demand.
London Borough of Ealing	
Local Plan, Adopted 2012	• Policy 3.1 aims to realise the potential of the A40 Corridor and Park Royal, with ambitions to encourage sustainable economic development and to promote Park Royal as a centre for green industry in the borough. • Policy 3.4 aims to improve transport access to Park Royal through the Southern Gateway, establishing a better focal point for businesses with better facilities available. This could potentially lead to 2,000 new office jobs in the area.
London Borough of Hammersmith and Fulham	
Core Strategy, Adopted 2011	• Sets out the council's development plan for the next 20 years. • The Core Strategy seeks to provide the conditions for businesses to thrive, ensuring that there is a broad range of employment opportunities for the qualifications and skills of the local people. • There is potential to further increase activity in the creative and media industries, with the borough being a favourable location for these firms. • Hammersmith Hospital and Imperial College Healthcare NHS Trust provide a significant potential for expansion of medical research and for related activities to be established in the borough. • The continued growth of the local economy and the regeneration of deprived and run down parts of the borough depends on improvement in access and the reduction of the adverse effects of traffic congestion, especially on north-south routes. • The council will continue to promote Old Oak Common as a location for a major rail interchange
Employment Study (2016)	• Employment has fallen in LBH&F in 2013 and 2014 from a peak of 164,750 in 2012 down to 156,450 in 2013 and 155,450 in 2014. • There is a high concentration of television programming and broadcasting activities, sound recording and music publishing activities, about 20 times the UK average concentration. • In LBH&F the rents have doubled between 2009 and 2015 in central Hammersmith from approximately £25 to £50 per sqft and available, vacant offices decreased to 1.5% in Q1 2015 and now stands at just 3.85% in Q4 2015. • LBH&F is projected to have 175,000 jobs by 2036, an increase of 13% from the number employed in 2014. Around 80,200 of these will be in B1 (office) use sectors. To accommodate these, an additional 383,454 – 511,272 sqm of office space is required by 2036.
Emerging Economic Development Strategy (2016)	• The council is currently in the process of updating its evidence base including the production of a new Economic Development Strategy. • While the document is yet to be published, consultation with LBHF has highlighted that the focus of the EDS is on supporting the existing business base while also attracting new inward investment. Particular focus is being placed on maximising the economic value related to major regeneration and development activity in the heart of the Borough at White City. • As part of this process, a large degree of emphasis is being placed on the development of STEM sectors – including digital, technology, life sciences and bio-medicine, and arts and culture. This reflects the longstanding media strength of

	the sub-region area and the proposed Imperial College 'Imperial West' development at White City.

Source: Local Authority Websites

Implications for OPDC. A review of policy and strategy documents and consultations with Borough officers suggests that sector specific / sector led approaches to economic development are not currently being pursued in Ealing or Brent. In Hammersmith and Fulham, a large degree of emphasis is being placed on the development of STEM sectors – including digital, technology, life sciences and bio-medicine, and arts and culture. This reflects the longstanding media strength of the sub-region area and the proposed Imperial College 'Imperial West' development at White City.

3. Profiling the Old Oak and Park Royal Economy

3.1 This section provides an overarching profile of the Old Oak and Park Royal economy, to identify its key business and sector characteristics. Analysis builds on that provided within the Old Oak and Park Royal Socio-Economic Baseline (2016) and the Park Royal Atlas (2014), providing a closer examination on the area's current sector strengths and trajectories.

Understanding Employment and Business in the OPDC Area

There are a number of sources which provide intelligence on employment and businesses in the OPDC area and which are referred to throughout this report.

Data from the ONS Inter-Departmental Business Register provides intelligence on employment and businesses, and is the ONS data source which can be mapped most closely against the OPDC boundary. As such, this data source has been used to provide the headline employment (43,100) and business (1,700) estimates for the OPDC Development Area. It has also been used to map the location of specific sectors and businesses across the area.

While the IDBR is the most accurate source of information on current employment within the Development Area, it does not provide time-series information, and is difficult to use for benchmarking performance and sector characteristics against other area. As a result, all information on employment and business change and sector performance in this report is provided by the ONS Business Register and Employment Survey (BRES) and ONS UK Business Count.

A further source of local level intelligence is the Park Royal Atlas which was prepared in 2014 and provides detailed mapping of uses across Park Royal. The Park Royal Atlas provides valuable local level intelligence regarding the spatial distribution and nature of activities taking place in Park Royal. With this in mind, we refer to the Park Royal Atlas where relevant throughout this report – including throughout this chapter and also in the key sector profiles in Chapter 4.

More information on these data sources is provided within Appendix E.

3.2 For the purpose of analysis and to maintain consistency across other reports, we have used the same geographical areas for statistical analysis as used within the OPDC Socio-Economic Baseline (see Figure 3.1). These are:

- The OPDC Development Area, which is the best statistical fit for the OPDC planning authority boundary
- The OPDC Region, which includes the OPDC area and a wider sub-regional hinterland.

3.3 Where relevant, we compare performance against a number of benchmark geographies – including the West London Alliance Area, London as a whole and South East England. More detail on these definitions is provided in Appendix D.

Summary of Key Messages

- It is estimated that the Old Oak and Park Royal economy employs 43,100 people across around 1,700 businesses. The majority of activity within the area currently occurs within Park Royal.
- The area has experienced strong growth in recent years, with employment growth of 19% (8,300 jobs) since 2009 (higher than comparator areas) and growth in the business base of 18% (350 businesses).
- The OPDC area is noticeable for the structure of its business base: while the majority of businesses are micro sized (with around three-quarters of businesses employing between 0 and 4 people), this proportion is low when compared to other areas. Reflecting the nature of the area, there is a comparatively strong concentration of larger businesses in the area.
- As would be expected given Park Royal's designation as an industrial area, there is a strong local specialism in a range of industrial activities including manufacturing (particularly food manufacturing, but also other forms of manufacturing), transport, logistics and wholesale.
- The area also has strengths in a range of creative activities. While creative employment has declined in recent years (partly reflecting the BBC's activities just outside the official OPDC boundary), the creative business base has been growing strongly.
- Generally speaking, performance has been strong across the economy over the past five years. Strong growth has been experienced in sectors including transport, warehousing and logistics, professional services and business support services.
- While there has been some contraction in the food manufacturing, construction, retail, public sector and digital and creative sectors, these have typically been relatively small and it should be noted that the size of the business base in a few of these sectors (including food manufacturing and ICT and Digital) has been growing.
- Looking ahead, the latest GLA employment forecasts suggest that sectors which are projected to experience the highest growth rates *across London* over the next 25 years are professional, real estate, science and technology (+44%), ICT (+36%), education (+33%) and arts, entertainment and recreation (+31%). Sectors which are expected to experience a decline over the next 25 years are manufacturing (-39%), wholesale (-19%), primary and utilities (-13%), transport and storage (-12%) and public administration and defence (-8%).

Introducing the OPDC Economy

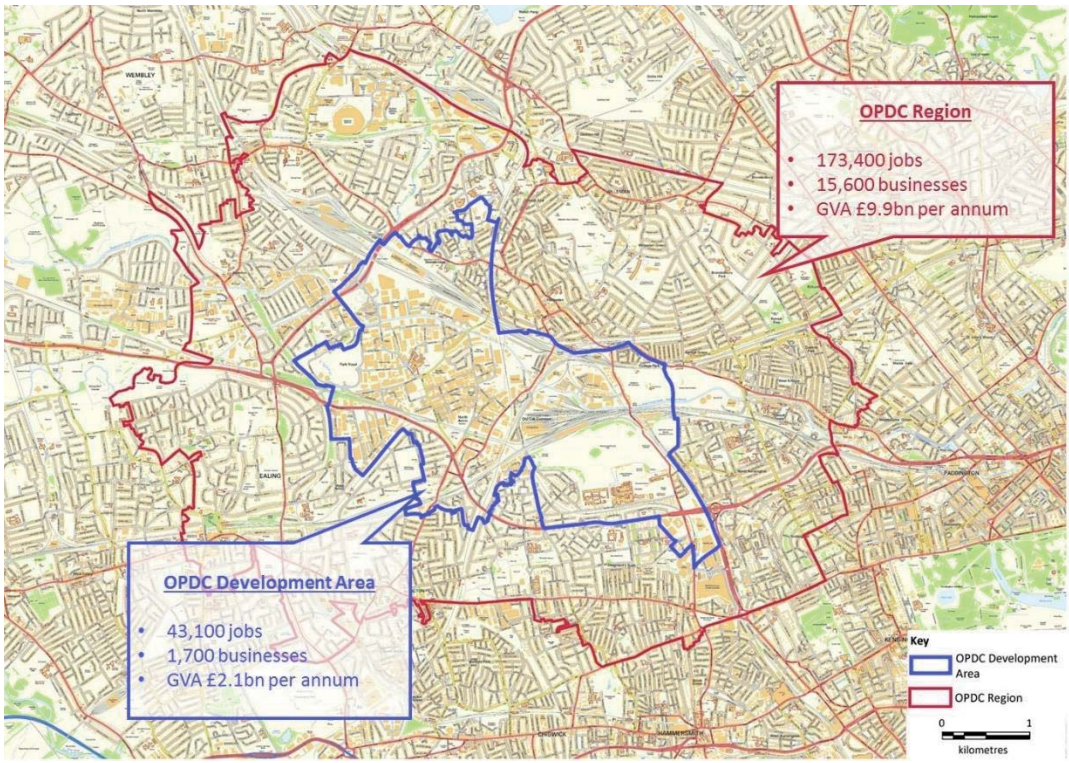
Size and Importance of the Economy

3.4 The Old Oak and Park Royal area covers 65 hectares[6] across 3 local authority boundaries – Brent, Ealing and Hammersmith and Fulham.

3.5 Based on data from the ONS IDBR, there are around 43,100 people are employed within the OPDC Development Area across 1,700 businesses. Based on these employment levels, we estimate that the area contributes Gross Value Added (GVA) of around £2.1 billion per annum.

3.6 The Old Oak and Park Royal area plays an important role in the wider west London area: it accounts for around a quarter of employment across the wider OPDC Region and 5% of total employment across the West London Alliance area.

Figure 3.1 Current Employment and Business Characteristics in OPDC Economy



Source: ONS IDBR (2016) and BRES (2014), ONS UK Business Count (2015)

Spatial Profile of the Economy

3.7 Currently, most of the economic activity in the Old Oak and Park Royal development area occurs within the Park Royal Industrial Estate, with much lower levels of economic activity in the Old Oak area. This is demonstrated by the mapping of businesses in Figure 4.2 overleaf, with the majority of businesses identified located to the west of Victoria Road.

[6] Socio-Economic Baseline – Old Oak and Park Royal, Working Paper 74, GLA Economics (2016)

Figure 3.2 Spatial Distribution of Businesses and Employment in OPDC Development Area – Location of Businesses (left), Employment Density (right)



Source: ONS IDBR (2015)

Economic Functionality

3.8 The OPDC economy is subject to a wide range of economic flows and dependencies across these wider functional geographies which influence and underpin performance – including access to markets (proximity to central London and Heathrow provide the area with a strong locational advantage), supply chain linkages, and labour market flows (the OPDC area has access to 4 million working aged people within 60 minutes' travel time by public transport).

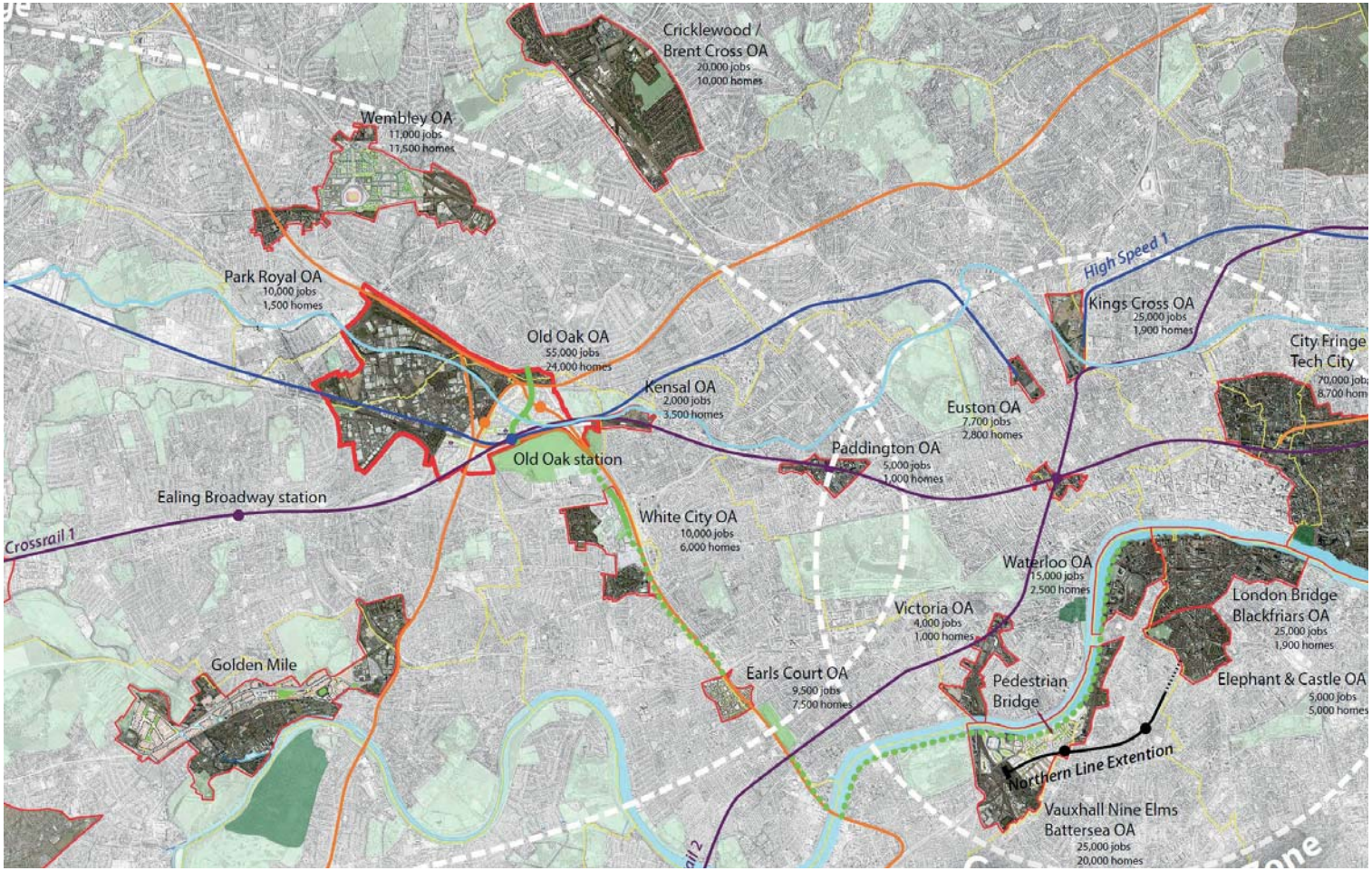
3.9 The Old Oak and Park Royal context is also heavily influenced by the economic development plans and proposals across the wider London area. This includes (but is not limited to):

- Proximity to other economic hubs – most notably central London to the east, but also other hubs in north and west London such as the Golden Mile
- Wider regeneration and development investment – as illustrated by the plan overleaf, the Old Oak and Park Royal area is in close proximity to numerous other Opportunity Areas, each of which include proposals for the delivery of significant amounts of jobs and homes
- Major transport investments – such as the delivery of Crossrail and HS2, which have the potential to dramatically impact on the economic geography of London
- Proximity to key economic assets – such as universities and research institutes both in central London (eg the Francis Crick Institute) and west London (eg Imperial College and Brunel University).

Implications

In considering future growth potential, it is important that Old Oak and Park Royal is not considered in isolation. Reflecting its location within London, the area should be viewed as a constituent part of much wider functional economies. The performance and dynamics of these wider area, will impact on local economic demand and evolution.

Figure 3.3 Opportunity Areas in central and central west London



Source OPDC Local Plan

Recent Economic Performance

3.10 The OPDC development area has performed strongly over the last five years, with growth in the employment and business base above the national level. The number of jobs in the OPDC development area has increased by 19% (8,300) between 2009 and 2014, while the business base has increased by 18% (350) between 2010 and 2015.

3.11 Interestingly, the growth in the business base within the OPDC development area is lower than across comparator areas inside London, and suggests that some firms may be struggling to located in the area due to its affordability (especially amongst recently established businesses).

3.12 The wider OPDC Region also recorded strong growth in recent years, with employment growth of 17% and growth in the business base of 28%.

Table 3.1 Summary of Business and Employment in the OPDC Development Area and Region, alongside comparator regions

	Business Change (2010-15)		Employment Change (2009 -14)	
	Absolute Change	% Change	Absolute Change	% Change
OPDC Development Area	+350	+18%	+8,300	+19%
OPDC Region	+3,450	+28%	+25,100	+17%
West London Alliance	+23,250	+27%	+104,700	+13%
London	+112,600	+29%	+580,900	+14%
South East	+44,400	+11%	+155,700	+4%
England	+305,900	+14%	+1,083,200	+5%

Source: ONS BRES, 2014 and ONS UK Business Count, 2015

3.13 Closer analysis of the evidence highlights that the OPDC development area experienced a contraction in the business and employment base in the 2010-2011 period. However, recovery has been strong in the period since, with higher levels of employment and business growth than seen across all other comparator areas.

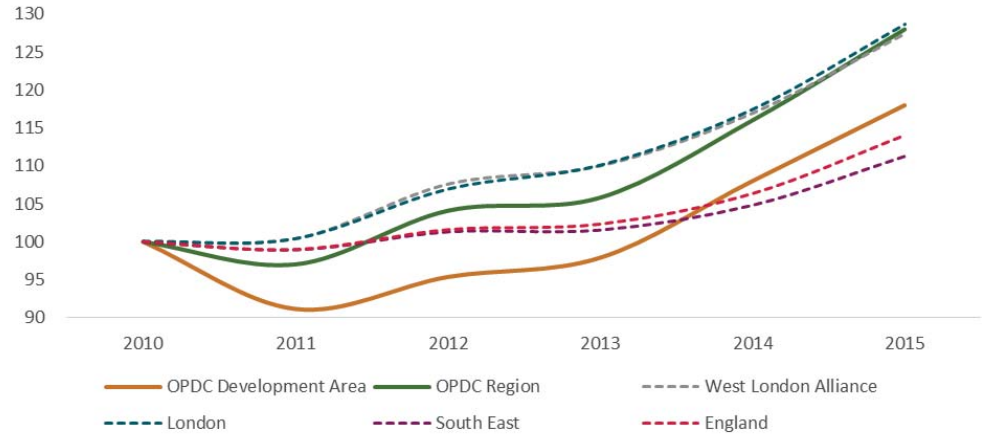
Figure 3.4 Recent Employment Performance, 2009-14



Source: ONS BRES, 2014

Note: Indexed data where 100 = 2009 employment

Figure 3.5 Recent Business Performance, 2010-15



Source: ONS UK Business Count, 2015

Note: Indexed data where 100 = 2010 business base

Implications

The evidence suggests that the local economy has been performing well in recent years, with increases in the number of jobs and businesses. Lower than average growth in the business base is likely to reflect a number of factors, including constraints in the supply of space, and the fact that the OPDC area is characterised by larger businesses than average in other areas in London, with lower than average levels of enterprise.

Nature of the Business Base

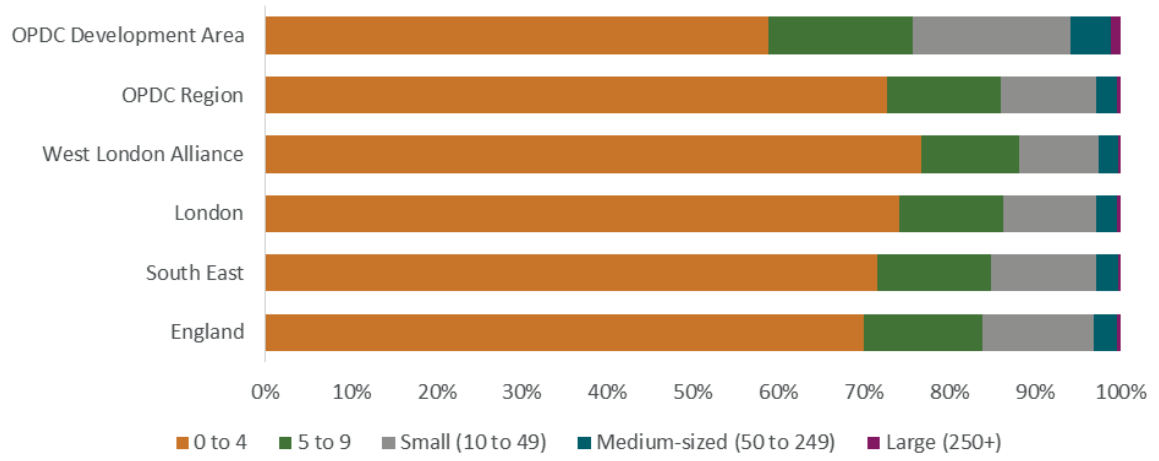
3.14 The structure of the OPDC development area business base is relatively distinctive compared to the comparator geographies.

3.15 Businesses in the OPDC development area are generally larger than those in comparator areas. Nearly a quarter of businesses (24%) in the OPDC development area employ more than 10 employees, much higher than in the OPDC region (14%), West London Alliance (12%), London (14%) and nationally (16%). The OPDC development area has 30 businesses which employ more than 250 people, accounting for 1.4% of all large businesses in London.

3.16 It is worth noting that despite the relatively high number of large businesses present in the OPDC development area, over three-quarters of businesses (76%) employ between 0 and 4 people, and a further 18% employ five to nine people. This highlights the importance of the SME business base within the OPDC development area.

3.17 As demonstrated previously by Figure 3.2, there are some clusters of micro businesses across the central area (e.g. around Old Park Royal and along Victoria Road) and eastern edge of Park Royal (presumably in shared workspace or small business units), outside of this, there are no significant spatial clustering's in terms of business size.

Figure 3.6 Size of Businesses (number of employees)



Source: ONS UK Business Count, 2015

Profiling the OPDC Economy

3.18 To identify current sector specialisms within the OPDC area, we have undertaken detailed analysis of the sector profile of the local economy.

Sector Strengths

3.19 Our analysis breaks the economy into a number of broad sector groupings to demonstrate overarching trends. These has been chosen to provide an indication of the overarching nature of the economy. This shows that:

- **Manufacturing** – the OPDC development area has a relative strength in manufacturing, which accounts for 6,800 jobs and is 5.5 times more concentrated[7] than is average across London. Within this, there is a particular strength in food manufacturing which contributes 4,400 jobs (65% of all manufacturing employment) and is highly specialised compared to the London average (location quotient = 13.5). The 'general' manufacturing sector is also important, contributing 1,300 jobs, with a specialisation of 3.1 times the London average. In addition, 'higher tech' manufacturing is also highly specialised in the OPDC development area, accounting for 900 jobs and is 3.2 times more concentrated than across London. The creative manufacturing sector has also demonstrated growth in recent years but remains comparatively small.
- **Wholesale, logistics and transport** – accounts for a quarter of employment in the OPDC development area, with 12,900 jobs in around 520 businesses. Activity in this sector is more concentrated than across London, with employment 3.1 time more concentrated. The sector is one of the fastest growing in the OPDC development area, with employment growth of 54% over the last five years, significantly higher than experienced across London (+7%) and the West London Alliance (+10%). Warehousing and logistics (LQ = 5.8) and wholesale (4.2) are the most specialised sectors in the OPDC development area amongst

[7] Concentration of activity is measured by Location Quotients: a value of more than one indicates that activity is more concentrated in the OPDC development area than in London; lower than one denotes a lower than average concentration.

this sector, with both also experiencing high employment growth over the last five years (+60% and +55% respectively).

- **Local service sectors** – including retail, construction, hospitality and public administration, this sectors accounts for nearly a third of employment in the OPDC development area (15,100 jobs) and a third of businesses (770). The sector has experienced employment decline over the last five years, decreasing by 5% (or 750 jobs). Only the hospitality, leisure and recreation sector experienced employment growth in the OPDC development area, increasing by 5% between 2009 and 2014, compared to decreases of 4% in the construction sector, 5% in public administration and 8% in retail. The sector is much less specialised in the OPDC development area compared to other sectors in the economy, with only 0.6 times the concentration of employment as across London. Only retail (LQ = 1.2) has a higher concentration of employment in the OPDC development area than in London. This largely reflects the inclusion of motor trade activities within the broadly defined retail sector; motor trade activities are a relative strength for the area, something explored in more detail in chapter 5.

- **Business and Professional services** – this sector accounts for a third of employment in the OPDC development area, although the concentration of employment is 24% less that London's (LQ = 0.76). The sector has experienced a high level of growth over the last five years with employment increasing by 35% and the business base increasing by 44%. Business support services has been the strongest growing sector, having grown by 203% since 2009, creating an additional 4,000 jobs in the OPDC development area. Employment in the 'other services' sector is highly concentrated in the OPDC development area compared to London, with a location quotient of 1.9.

3.20 In addition to these broad groupings, there are a number of sectors which 'cut across' the economy. These cover multiple SIC codes[8], with a mix of sectors included from manufacturing to services depending on how the sector is defined.

- **Low carbon** – the low carbon sector is currently a relatively small sector in the OPDC development area accounting for around 2% of employment (1,300 jobs). Approximately 300 of these jobs can be directly attributed to the low carbon economy, with a further 900 jobs in secondary roles and 100 jobs in the low carbon supply chain. The sector has experienced significant growth over the last five years, with employment growth of 30%, creating an additional 300 jobs.

- **Creative industries** – the creative sector accounts for around 7,000 jobs in the OPDC development area, 13% of total employment. It has experienced a slight decrease in employment over the last five years (-3%), although this can largely be attributed to the developments at BBC Media Village. The creative sector has a similar employment concentration to London (location quotient of 1.1), although employment growth has been much lower than London's (-3% vs. 28%). Despite falling employment, the business base in the OPDC development area has increased dramatically, with a 47% increase over the last five years.

3.21 Taking a closer look at the sectors within these broad sector groupings reveals more detail on the overarching characteristics of the OPDC development area. More detail can be found in Table 3.2, Figure 3.7 and Figure 3.8.

- The largest sectors in the OPDC development area are wholesale (7,300 jobs); ICT, Media and Creative activities (6,700 jobs); public administration, education and health (6,400

[8] Standard Industrial Classification (SIC) Codes divide the economy into groups which can be classified by a common activity. A full table showing the definitions used in this report can be found in Appendix F -

jobs); retail (5,600 jobs); and business support services (5,900 jobs). Combined these five sectors account for 61% of all employment in the area.

- However, in terms of size relative specialisation, the most important sectors in the OPDC development area can be considered to be food manufacturing (4,400 jobs and LQ of 13.5), transport (2,500 jobs and LQ of 1.3), wholesale (7,300 jobs and LQ of 4.2), warehousing (3,100 jobs and LQ of 5.8), business support services (5,900 jobs and LQ of 1.1) and ICT, Media and Creative Services (6,700 jobs and LQ of 1.2).
- Broadly speaking, there has been growth across the economy over past 5 years. Growth has been particularly strong in the transport, wholesale and warehousing sectors, in financial and professional services, and in business support services activities. In contrast, there have been small contractions in employment in food manufacturing, retail, ICT, creative and media, construction, and public sector activities.

3.22 These activities are considered in more detail later in the chapter.

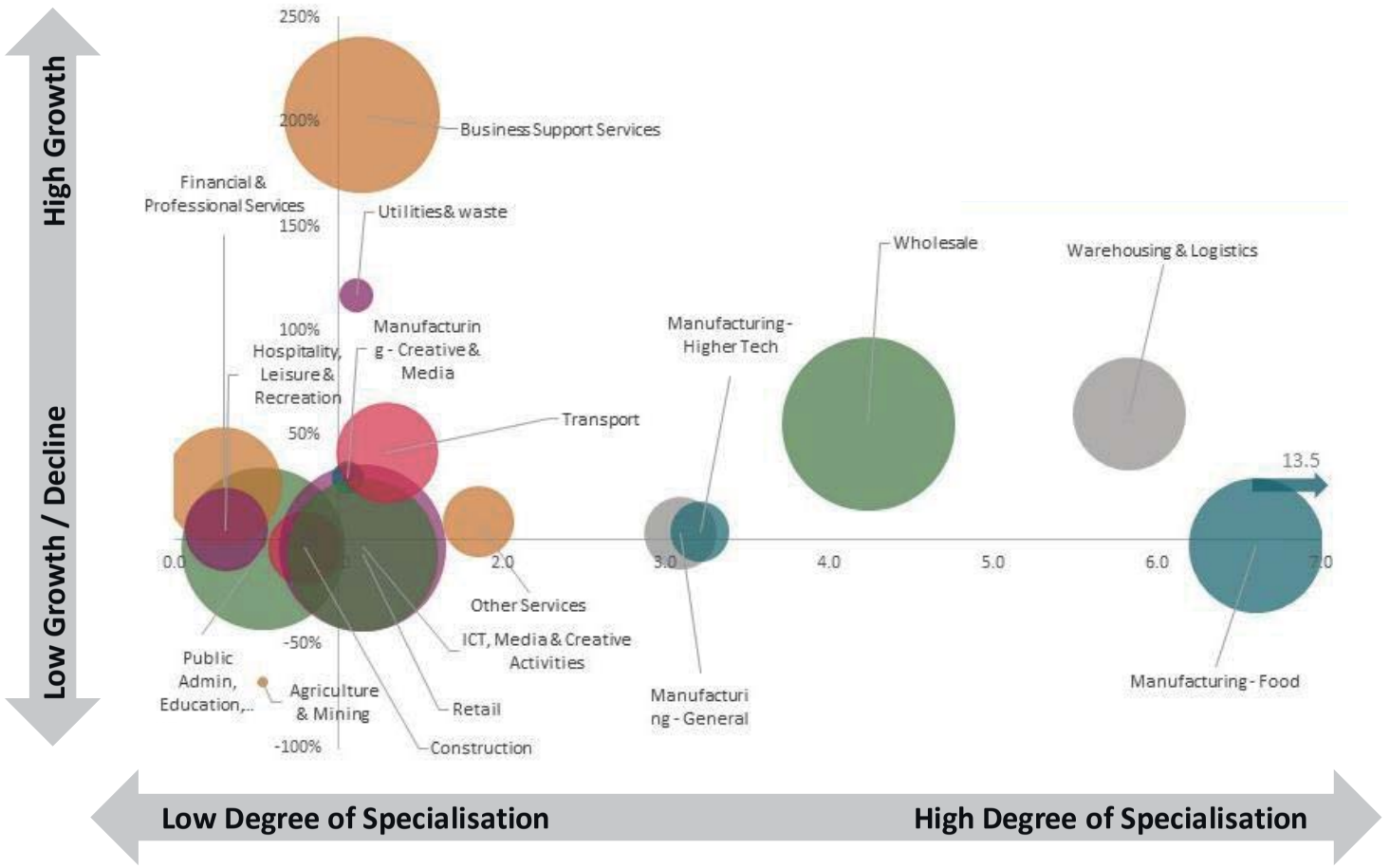
Table 3.2 Summary of Employment in the OPDC Development Area

Main Sector	Detailed Sector	Business				Employment			
		UK Business Count				BRES			
		2015			Change	2014			Change
		No.	% of all	LQ	2010-15 (%)	No.	% of all	LQ	2009-14 (%)
Manufacturing	Creative	30	1%	1.5	+25%	300	0%	1.1	+30%
	Food	50	2%	8.5	+67%	4,400	8%	13.5	-3%
	General	40	2%	1.7	0%	1,300	2%	3.1	+3%
	Higher Tech	10	0%	0.3	0%	900	2%	3.2	+4%
	All Manufacturing	**120**	**5%**	**2.0**	**+33%**	**6,800**	**13%**	**5.5**	**0%**
Wholesale, Logistics, Transport	Transport	100	4%	2.4	+36%	2,500	5%	1.3	+42%
	Warehousing and Logistics	70	3%	5.1	+27%	3,100	6%	5.8	+60%
	Wholesale	360	15%	3.6	+1%	7,300	14%	4.2	+55%
	All Wholesale, Logistics & Transport	**520**	**23%**	**3.4**	**+9%**	**12,900**	**25%**	**3.1**	**+54%**
Local Service Sectors	Retail	330	14%	1.4	-24%	5,600	11%	1.2	-8%
	Public Admin, Education, Health	120	5%	0.7	+77%	6,400	12%	0.5	-5%
	Construction	180	8%	1.0	+20%	1,300	2%	0.8	-4%
	Hospitality, Leisure & Recreation	150	7%	0.8	+15%	1,700	3%	0.3	+5%
	All Local Service Sectors	**770**	**33%**	**1.0**	**0%**	**15,100**	**29%**	**0.6**	**-5%**
Business and Professional Services	Business Support Services	170	7%	0.8	+43%	5,900	11%	1.1	+203%
	Finance and Professional Services	340	15%	0.6	+62%	3,300	6%	0.3	+25%
	ICT, Media and Creative Activities	290	13%	0.7	+49%	6,700	13%	1.2	-4%
	Other Services	100	4%	1.3	-5%	1,200	2%	1.9	+8%
	All Business & Professional Services	**890**	**39%**	**0.7**	**+44%**	**17,200**	**33%**	**0.8**	**+35%**
Primary	Agriculture and Mining	<50	0%	0.0	0%	<50	0%	0.5	-68%
	Utilities and waste	10	0%	0.6	0%	300	1%	1.1	+120%
Cross-Cutting Sectors	Low Carbon	<50	2%	0.7	0%	1,300	2%	1.1	+30%
	Creative Industries	320	14%	0.7	+47%	7,000	13%	1.1	-3%

Source: ONS BRES, 2014; ONS UK Business Count, 2015

Note: Where the employment location quotient for a sector is greater than 1 (i.e. there is a higher concentration of employment in the sector than in **London**), it has been highlighted **green**.

Figure 3.7 OPDC Development Area Sectors: Size, Concentration and Trajectory – **Employment**

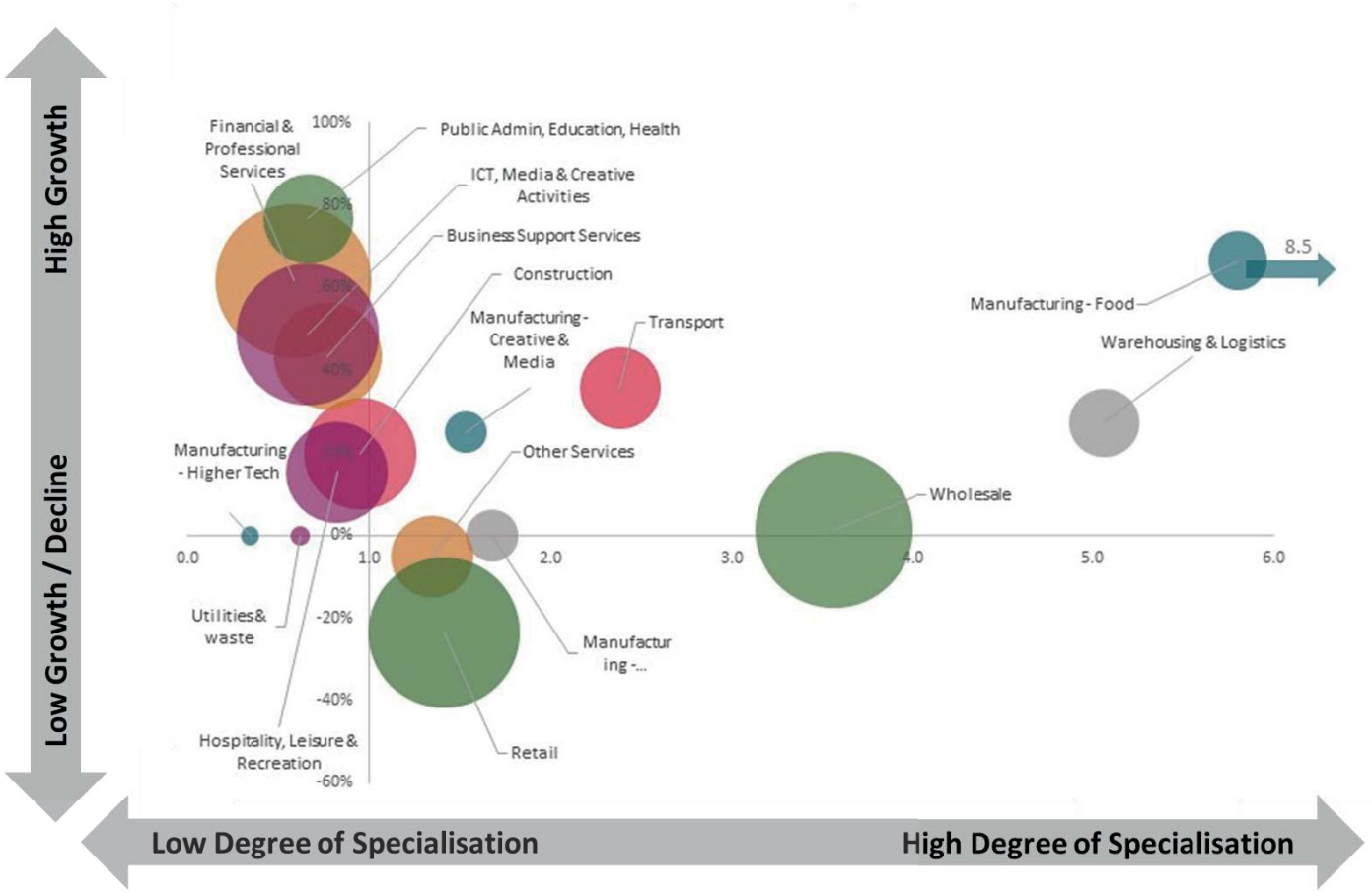


This chart summarises the current sector profile of the OPDC Development Area in terms of sector size, specialisation and recent change. It highlights the relative stregnth of the food manufacturing, and wholesale, transport and logistics sectors locally:

- **Size of the bubble** – denotes absolute number of jobs (2014)
- **Verticle positioning** – denotes recent employment change (2009-14). Bubbles to the top of the chart have experieced high growth, while those to the bottom have experienced lower growth or decline
- **Horizontal positioning** – denotes degree of specialisation relative to London (2014). Bubbles to the right of the chart are highly specialised locally), those to the left are less so.

Source: ONS BRES, 2014

Figure 3.8 OPDC Development Area Sectors: Size, Concentration and Trajectory – **Businesses**



This chart summarises the current sector profile of the OPDC Development Area in terms of sector size, specialisation and recent change:

- **Size of the bubble** – denotes absolute number of businesses (2015)
- **Verticle positioning** – denotes recent business change (2009-15). Bubbles to the top of the chart have experieced high growth, while those to the bottom have experienced lower growth or decline
- **Horizontal positioning** – denotes degree of business specialisation relative to London (2015). Bubbles to the right of the chart are highly specialised locally), those to the left are less so.

Source: ONS UK Business Count, 2015

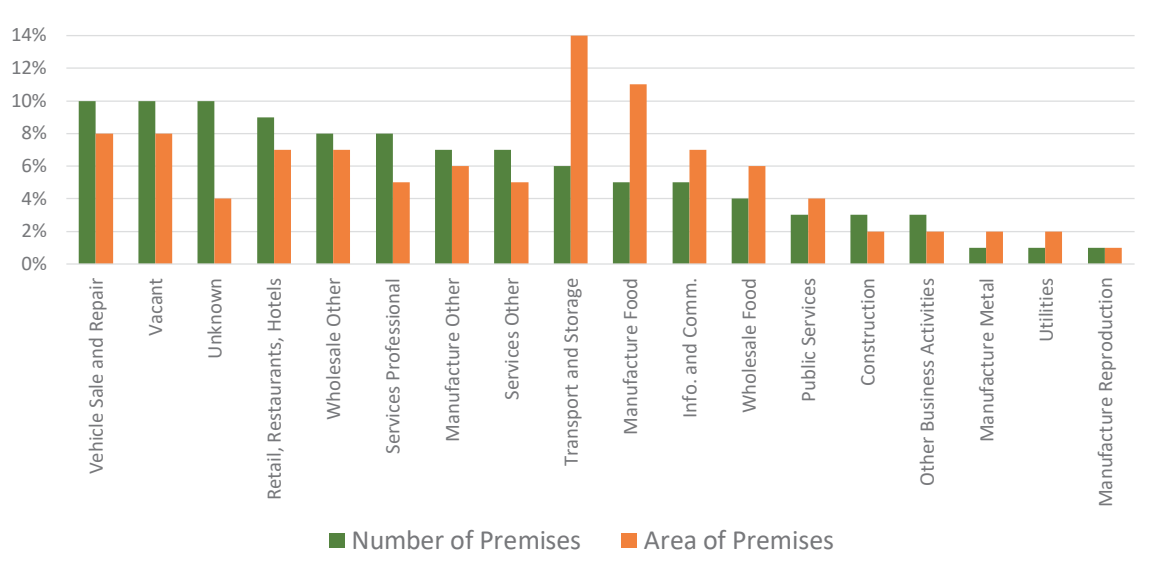
The Park Royal Atlas: Sectors and Uses

As noted before, it is not possible to directly compare the quantitative analysis provided within the Atlas with the above ONS data. That said, the Atlas provides valuable evidence on the types of uses and activities located within Park Royal – both in terms of sectors and in terms of workspace typologies.

Findings from the Atlas on the profile of workplaces in Park Royal (both number of premises and total floorspace) are summarised below.

The findings corroborate the preceding evidence regarding the broad range of economic activities located within Park Royal:

- Park Royals' workplaces are occupied by a range of activities, with no single dominant uses. In terms of total number of workplaces, there is a broad range of business sectors represented, including wholesale and logistics; manufacturing, particularly food; professional and other services, including strong presence of prop hire and studios; and vehicle sale and repair.
- In terms of the amount of floor area occupied by business sectors, the proportion of the business sectors shift significantly compared to the number. The transport and storage, food manufacturing, information and communications, and wholesale sectors account for the most floorspace. Vehicle sales and repair also account for a large proportion of floorspace – likely to partly reflect the presence of Car Giant.
- In total, wholesale, transport and storage use 27% of floor area, while manufacturing uses occupy a further 20%.



Source: Park Royal Atlas

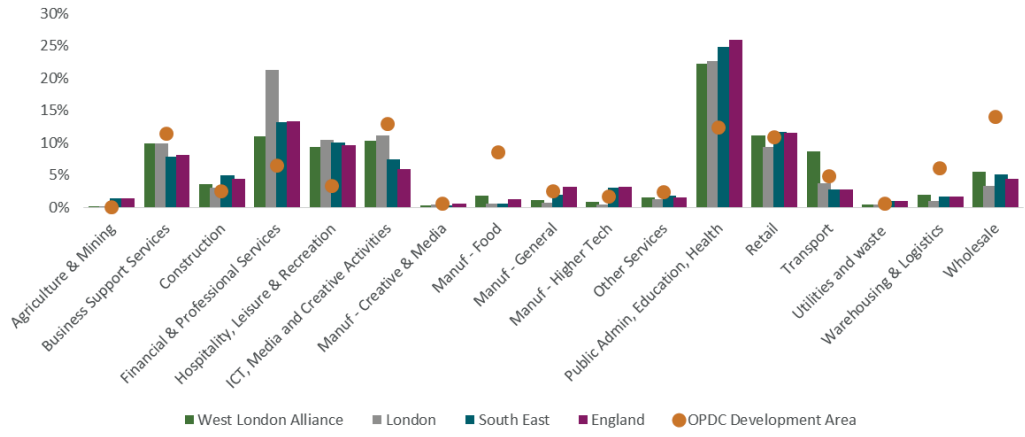
Benchmarking Performance

3.23 When benchmarked against the wider comparator areas, the sector specialisms of the OPDC development area are further emphasised.

3.24 Compared to comparator areas, including the West London Alliance, London, the South East and England, the OPDC development area has a much higher proportion of employment in food

manufacturing, warehousing and logistics, wholesale and ICT, Media and Creative activities, with all of these having at least double the proportion of employment than nationally.

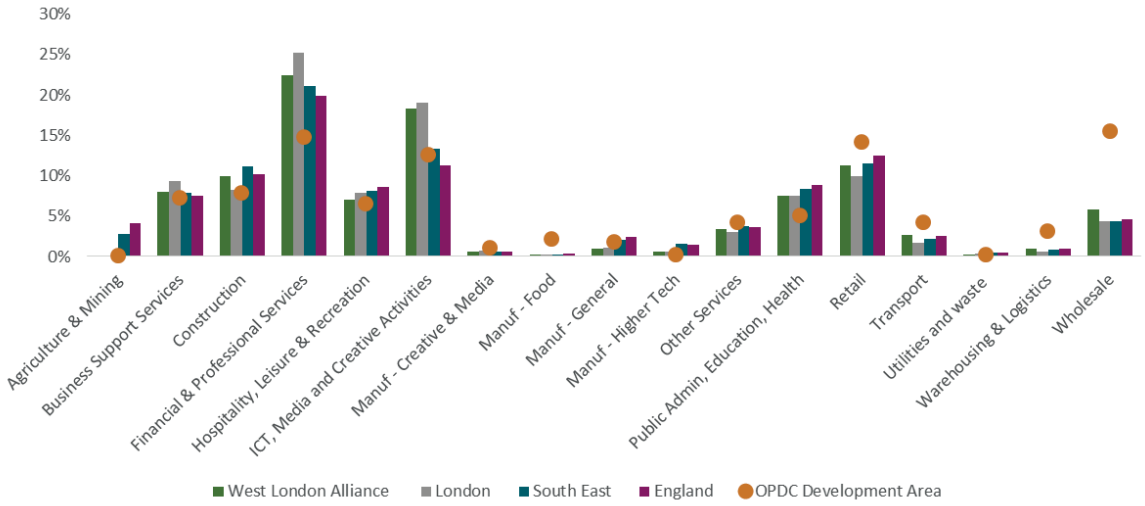
Figure 3.9 % of **Employment** by sectors in OPDC Development Area against comparators, 2014



Source: ONS BRES, 2014

3.25 These sector specialisms are also true within the local business base. Sectors with a higher concentration of business activity in the OPDC development area than comparator areas include food manufacturing, wholesale, warehousing and logistics, retail, transport and creative and media manufacturing.

Figure 3.10 % of **Businesses** by sectors in OPDC Development Area against comparators, 2015



Source: ONS UK Business Count, 2015

Sector Characteristics: Size and Economic Value

3.26 Data from the IDBR allows further interrogation of some of the key characteristics of the sectors locally.

3.27 The average number of employees for businesses in the OPDC area is 25:

- Food manufacturing has the highest average size at 126 employees. This is likely to partly reflect the presence of larger companies, but may also reflect some data caveats, with

some of the smallest firms in the sector not fully captured in official statistics (e.g. some market traders).

- The wholesale, warehousing and logistics sectors are also characterised by slightly higher than average business sizes
- Business and professional service sectors are typically smaller in size.

3.28 There is a broad range of disparities in employment densities between individual businesses within a sector; these are explored in chapter 4.

Table 3.3 Average number of employees per business by sector

		OPDC Development Area
Manufacturing	Creative and Media	6
	Food	126
	General	22
	Higher Tech	26
Wholesale, Logistics, Transport	Transport	35
	Warehousing and Logistics	59
	Wholesale	31
Local Services	Construction	12
	Hospitality, Leisure and Recreation	12
	Public Admin, Education, Health	51
	Retail	24
Business and Professional Services	Business Support Services	20
	Financial and Professional Services	11
	ICT, Media and Creative Activities	16
	Other Services	18
Average Number of Employees per Business		**25**

Source: IDBR, 2016

3.29 Estimates of productivity (as measured by GVA per worker) provide a further an indication of the relative value being generated by the sectors locally:

- As might be expected, productivity is generally higher in the OPDC area than is average nationally, but is slightly lower than is average across London. This is largely due to the large proportion of comparatively high-value activities concentrated in Central London (e.g. financial services) which pushes the London-wide productivity higher.
- High productivity sectors in the OPDC area include financial and professional services, construction activities, warehousing and logistics, transport, wholesale and higher tech manufacturing. The highest productivity is in the 'other services' sector, although this is a relatively small sector and heavily influenced by a number of firms involved in the renting of construction equipment.

Table 3.4 GVA per worker across Key Sector in OPDC Development Area and Nationally

		OPDC Development Area	London	England
Manufacturing	Creative and Media	£43,800	£43,700	£37,500
	Food	£61,400	£66,500	£54,100
	General	£53,500	£56,100	£47,900
	Higher Tech	£88,800	£91,800	£78,700

Wholesale, Logistics, Transport	Transport	£79,700	£75,400	£59,200
	Warehousing and Logistics	£85,100	£69,200	£59,610
	Wholesale	£76,500	£76,700	£64,300
Local Services	Construction	£92,700	£99,000	£63,700
	Hospitality, Leisure and Recreation	£26,600	£29,500	£23,500
	Public Admin, Education, Health	£19,900	£19,400	£16,800
	Retail	£39,900	£75,400	£30,300
Business and Professional Services	Business Support Services	£47,100	£50,900	£38,400
	Financial and Professional Services	£94,000	£141,400	£91,200
	ICT, Media and Creative Activities	£63,100	£87,300	£79,000
	Other Services	£126,700	£67,200	£67,000
Average GVA per worker		**£60,500**	**£68,000**	**£46,100**

Source: ONS UK Regional Accounts (2015) and ONS BRES (2014)

3.30 In many respects information on average (median) salaries reinforces the above messages:

- As might be expected, median workforce salaries are generally higher in the OPDC area than is average nationally, but slightly lower than across London
- Higher median salary sectors in the OPDC area include financial and professional services, ICT, Media and Creative activities, transport activities and warehousing and logistics.

Table 3.5 Median Workplace Salary by Sector

		OPDC Development Area	London	England
Manufacturing	Creative and Media	£23,400	£21,200	£22,000
	Food	£20,500	£21,100	£21,400
	General	£26,600	£24,600	£24,900
	Higher Tech	£33,900	£34,800	£31,800
Wholesale, Logistics, Transport	Transport	£36,100	£34,200	£27,400
	Warehousing and Logistics	£34,000	£33,800	£26,700
	Wholesale	£29,100	£29,100	£24,000
Local Services	Construction	£32,100	£32,000	£27,500
	Hospitality, Leisure and Recreation	£15,900	£17,600	£13,100
	Public Admin, Education, Health	£29,300	£28,500	£21,700
	Retail	£19,400	£17,400	£14,300
Business and Professional Services	Business Support Services	£22,100	£23,000	£16,700
	Financial and Professional Services	£40,200	£48,700	£28,900
	ICT, Media and Creative Activities	£39,700	£38,600	£32,700
	Other Services	£20,700	£16,100	£17,100
Median Workplace Salary		**£28,600**	**£30,800**	**£22,500**

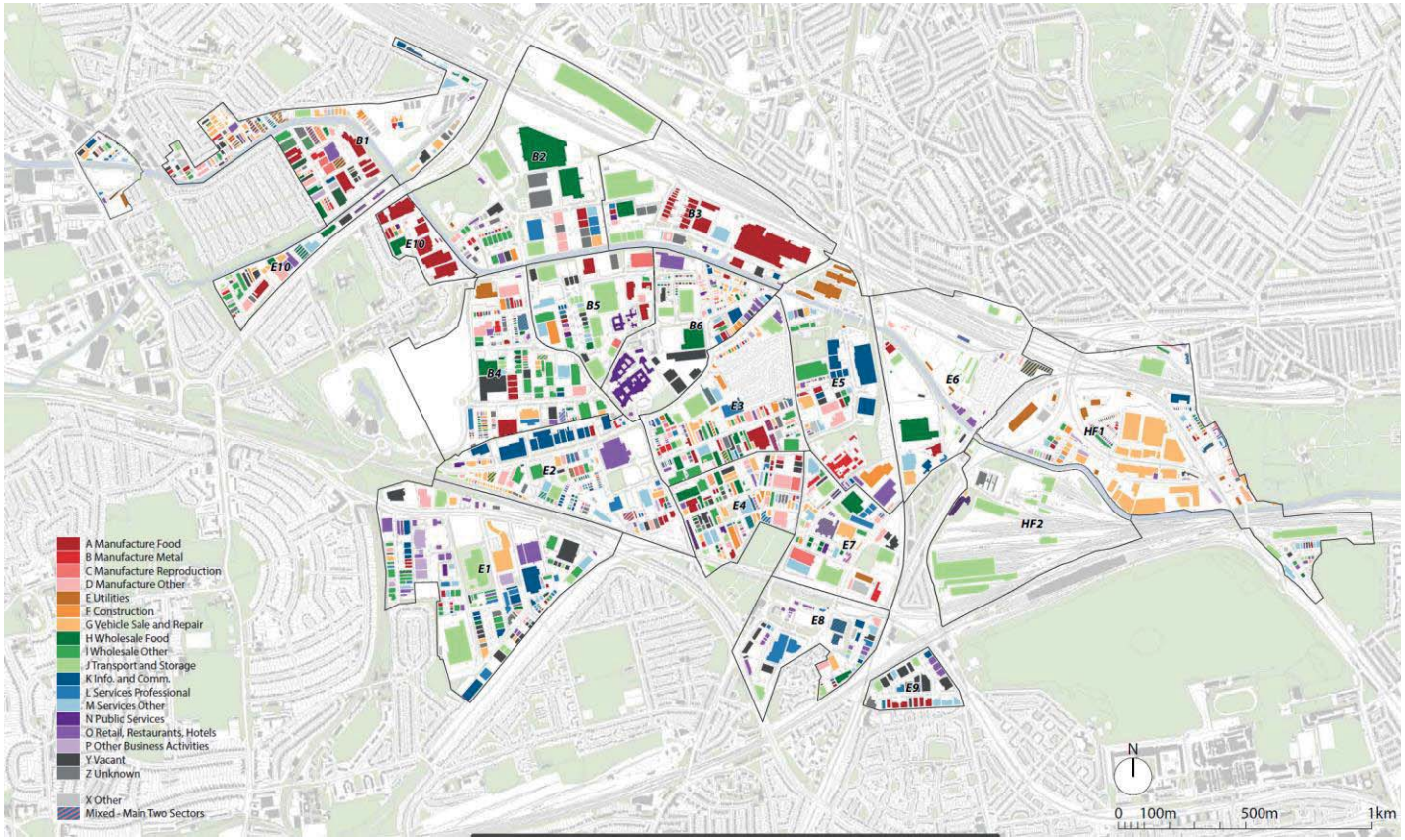
Source: ONS Annual Survey of Hours and Earnings (2015) and ONS BRES (2014)

Spatial Considerations

3.31 As noted previously, the Park Royal Atlas provides a detailed mapping of uses across Park Royal. The spatial mapping of sectors undertaken within the Atlas is presented overleaf. The map demonstrates the patchwork and highly varied nature of sector activities across Park Royal. That said, it is possible to identify clustering of activities in certain parts of the area, including larger food manufacturing business to the north and west of Park Royal and the large land take by Car Giant for motor trade uses in the east of the area.

3.32 Clustering of businesses in key sectors is considered in more detail on chapter 5.

Figure 3.11 Spatial Distribution of Sectors – Park Royal Atlas



Source: The Park Royal Atlas, 2015

Looking Ahead: Projections for Growth

3.33 Significant growth is projected for the OPDC area in the period to 2041. OPDC[9] estimate that there is potential to deliver up to 61,000 additional jobs over this period – more than doubling current employment levels in the area. It is estimated that this level of employment growth will support an additional £7.6 billion GVA per annum.

3.34 Employment forecasts provide intelligence on the trajectory of the local and London economy, and how different sectors are expected to perform in future years. Two different sets of forecasts have been considered to understand overall sector trajectory:

- Cambridge Econometric Employment Forecasts – provide sector projections for the period to 2051 at the Borough level. These are 'policy off' projections: they are based largely on past trends and future macro-economic forecasts and do not consider local level development and regeneration considerations
- GLA Employment Forecasts – these are triangulated forecasts, which match up trend-based forecasts with planned transport improvements and the availability of land for new employment sites. While these are policy-on, they do not provide sector intelligence at the local (Borough) level.

3.35 The forecasts are summarised in the table below, with full analysis provided in Appendix B. Because of the difference in approaches and methodologies, there is a degree of disparity between the two sets of forecasts. Largely speaking, however, the employment projections suggest there will be future growth in service sectors, with decline in industrial sectors. Professional and financial services and ICT, Media and Creative services are expected to grow strongly, but employment decline is expected in manufacturing and transport. Evidence from Cambridge Econometrics suggests the potential for growth in warehousing and logistics (this sector is not disaggregated within GLA forecasts).

Table 3.6 Comparison between Economic Forecasts, 2017-41

		GLA Forecasts (London)	Cambridge Econometrics	
			London	3 OPDC Boroughs
Primary	Agriculture & Mining	-4,300 (-13%)	-4,500 (-48%)	-200 (-50%)
	Utilities & Waste	-4,300 (-13%)	+3,000 (10%)	+200 (9%)
Manufacturing	Creative	-47,700 (-36%)	-300 (-1%)	+100 (5%)
	Food		-12,000 (-3%)	-4,600 (-29%)
	General		-22,000 (-45%)	-2,900 (-48%)
	Higher Tech		-17,500 (-51%)	-2,200 (-49%)
Wholesale, Logistics, Transport	Transport, Warehousing & Logistics	-103,100 (-14%)	-21,000 (-4%)	-3,500 (-6%)
Local Services	Construction	+63,500 (37%)	+33,300 (11%)	+2,900 (10%)
	Hospitality, Leisure & Rec	+64,800 (33%)	+133,400 (19%)	+11,400 (22%)
	Public Admin, Edu, Health	+263,000 (22%)	+47,800 (4%)	+4,400 (5%)
	Retail	+7,900 (2%)	+6,100 (1%)	+1,000 (2%)
	Prof and Financial Services	+447,000 (25%)	+157,600 (12%)	+5,000 (8%)
	Business Support Services	+133,500 (23%)	+157,400 (28%)	+11,500 (25%)

[9] Draft Development Capacity Study and Industrial Land Review

Business and Professional Services	ICT, Media & Creative	+156,000 (37%)	+91,400 (19%)	+7,900 (19%)
	Other Services	+28,100 (19%)	+20,600 (24%)	+1,900 (21%)
Grand Total		+861,500 (15%)	+573,200 (1%)	+32,900 (7%)

Source: GLA Economics, Cambridge Econometrics

3.36 While the employment forecasts are helpful in demonstrating overarching sector trends, the scale and nature of future growth in Old Oak and Park Royal will reflect a complex range of factors which are not accounted for within the forecasts – not least the delivery of Old Oak Common station, the significant levels of development planned for the area, and the role of OPDC and its partners in influencing and shaping future growth. This is considered in more detail in the next two chapters.

4. OPDC Opportunity Sectors

4.1 This chapter identifies the sectors of current and potential future importance to the OPDC economy, and examines the role that these sectors might play in the area in the future.

Summary of Key Message

Based on a detailed analysis on a range of sectors, a number of opportunity sectors for the OPDC area have been identified. This chapter provides detailed analysis of these sectors:

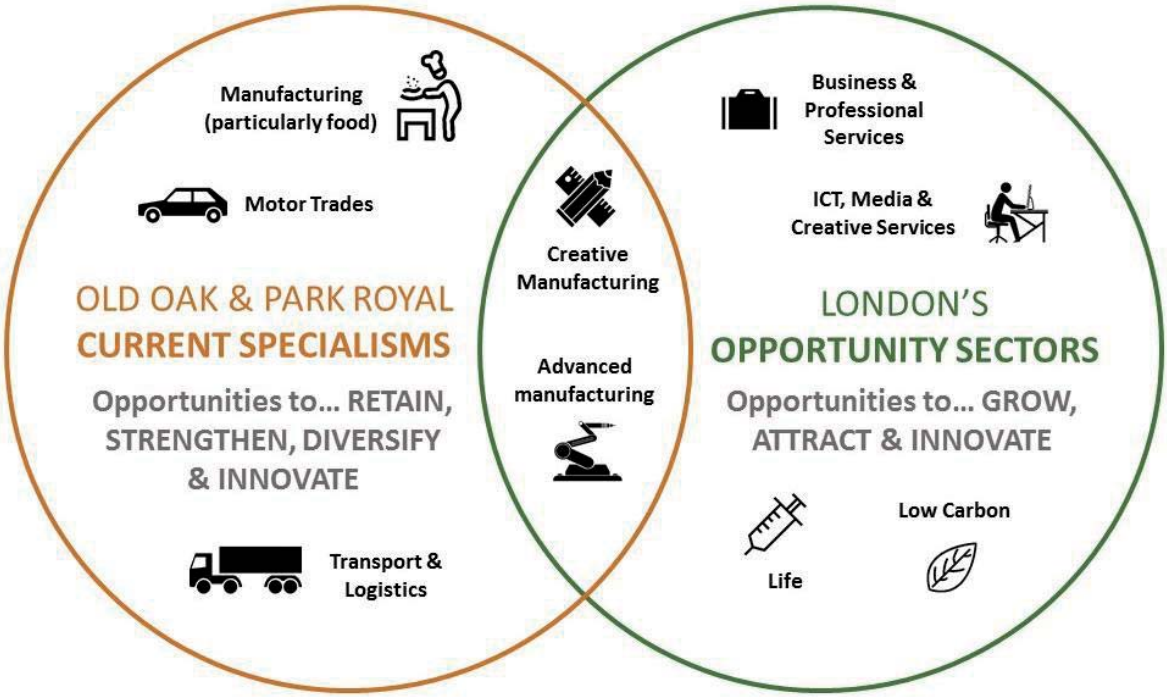
- **Food manufacturing**: an existing large presence in the OPDC economy, with the area well positioned to continue to be a hub of activity in the future given its existing competitive advantage.
- **Transport, Logistics and Wholesale**: accounts for around a third of employment at present and demand for space / employment in OPDC area is expected to remain strong in the future.
- **Motor Trades**: strong employment base at present given Car Giant presence. Future uncertain and dependent on where Car Giant relocates and technological change within the sector.
- **Business and Professional Services**: high level of activity in business support services at present. Strong growth potential in the future (especially in financial and professional services sector) given new, office-led development proposed around Old Oak Common station.
- **ICT, Media and Creative Services**: relatively strong presence in media-based activities and sector is rapidly developing across London. Potential for strong growth given delivery of new business space and proposed transport improvements, connecting it to strategic sites in London and Heathrow.
- **Advanced Manufacturing**: currently has a small presence, although given the sector is a national priority for growth, and existing manufacturing base, growth is expected
- **Creative Manufacturing**: very small presence in OPDC area at present. Potential for growth in future years, although likely to remain relatively small compared to other sectors.
- **Low Carbon**: very small presence in OPDC area, although there is potential to develop the sector locally, considering proximity of resource intensive industrial activities and future construction activity.
- **Life Sciences**: currently a very small presence, but in the longer term there may be potential for OPDC to capitalise on wider London sector development and proximity to hospitals and major research assets (e.g. Imperial West).

Identifying the Opportunity Sectors

4.2 The research in the preceding chapters has highlighted the importance of Old Oak and Park Royal economy in the wider London context, and the fact that performance in recent years has been relatively strong with growth in both employment and businesses.

4.3 Via the baseline research we have identified a number of opportunity sectors. While these sectors vary significantly in terms of their size, they are all activities which either currently define the OPDC economy, or which could contribute to future aspirations for economic growth, diversification and placemaking in the area:

- There are several clear **existing economic strengths** for Park Royal – largely in industrial type activities, in particular food manufacturing, transport, wholesale, logistics and to a lesser extent, motor trade activities.
- In addition, there are several **future sector opportunities** for the OPDC area. These are largely sectors which have been identified as priorities by the GLA and / or the national government, and which align how the area could change in the future, with its unique level of transport accessibility and associated comprehensive development opportunity:
  - The nature of development at Old Oak means that future growth is likely to be focused around office uses. Both employment projections and sector aspirations highlight the potential for future growth in London's professional and financial service, ICT and digital media sectors: Old Oak's location and connectivity are likely to make it an attractive location for these types of activities.
  - In addition, there are potential opportunities within the low carbon economy, advanced manufacturing and life sciences. Again, these are activities for which there are aspirations for growth across London and which could be suited to the OPDC area given the existing industrial nature of Park Royal, the potential for the delivery of new bespoke space, the strong connectivity and the proximity to existing and proposed research facilities / institutions (eg Imperial West).



4.4 Each of the identified sectors are explored in more detail below, focusing on current profile locally, key drivers and factors affecting each sector, and potential future role in Old Oak and Park Royal.

Current Sector Specialisms

4.5 Each of the OPDC's current sector specialisms has been analysed to better understand its current position, the opportunities for the sector in the future and what spatial and supporting requirements are necessary to support development within the sector. Focus is placed on food manufacturing, transport, logistics and wholesale, and motor trades.

Food Manufacturing

4.6 The food manufacturing sector can best be described as encompassing firms which are involved in the processing and production of food and drink. The sector has significant overlaps with other sectors of the economy, and although it has not been possible to explore these linkages statistically, they have been explored as part of our qualitative analysis of the sector. Sectors with strong links to food manufacturing include wholesaling, transport and logistics, and retail. Within some companies, there will be vertical integration, with firms undertaking more than one stage of the production process.

Table 4.1 Key Statistics for Food Manufacturing in the OPDC Development Area

	Year	**Metric**
Employment	*Number – 2014*	4,400
	Concentration	8% of all jobs; LQ vs London = 13.5
	Change (2009-14)	-3%
Businesses	*Number – 2015*	50;
	Concentration	2.2% of all businesses; LQ vs London = 8.5
	Change (2010-15)	+67%

Source: ONS BRES (2014) & ONS UK Business Count (2015)

Current Size and Characteristics in OPDC Area

4.7 Evidence from ONS suggests that the food manufacturing sector currently employs 4,400 people in around 50 businesses in the OPDC development area.

4.8 Firms within the OPDC development area produce an estimated £271 million Gross Value Added per annum, which equals £61,400 per worker. This is around the same level as the wider economy in the OPDC development area (£60,500).

4.9 It is the most specialised sector in the OPDC development area relative to London, with an employment location quotient of 13.5. The sector accounts for around 8% of employment, considerably higher than across London and nationally (both 0.6%). Businesses in the food manufacturing sector account for 2.2% of the business base, which is also higher than experienced across London and nationally (both 0.3%).

Food Manufacturing: Observational Analysis

Evidence contained within the Park Royal Atlas suggests that there are a higher number of active food manufacturing businesses in Park Royal, with around 110 active workplaces recorded, covering 250,000 sqm of floorspace. This is likely to reflect the fact that some of the smaller businesses / enterprises are sometimes excluded from ONS figures as they are below the VAT threshold.

Despite the discrepancy, both datasets allow the conclusion that food manufacturing is one of Park Royal's key specialisms, and a sector which distinguishes it within the London context.

4.10 ONS evidence suggests that there has been strong growth in the business base in recent years, while the employment base has seen a slight decline. This suggests that growth has been focused among the smaller business base, with employment contraction occurring within some of the bigger businesses.

4.11 Three sub-sectors in food manufacturing account for around three-quarters of all employment. These are the manufacture of prepared meals and dishes; the manufacture of bread, fresh pastry and cakes (1,000 jobs); and the manufacture of other food products (1,000 jobs) which is a catch-all categorisation covering a number of different activities.

Table 4.2 Largest Sub-Sectors in **Food Manufacturing** by Employment in the OPDC Development Area

Sub-Sector	SIC Code	No of Employ.	LQ	Employ Change
Manufacture of prepared meals and dishes	10850	*	21.5	0%
Manufacture of bread; manufacture of fresh pastry goods and cakes	10710	1,000	11.2	-15%
Manufacture of other food products nec	10890	1,000	26.3	+34%
Manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes	10720	*	20.2	+1%
Production of meat and poultry meat products	10130	400	27.0	-3%
Other processing and preserving of fruit and vegetables	10390	*	4.3	+1329%
All Food Manufacturing	-	*4,400*	*13.5*	*-3%*

Source: ONS BRES, 2014

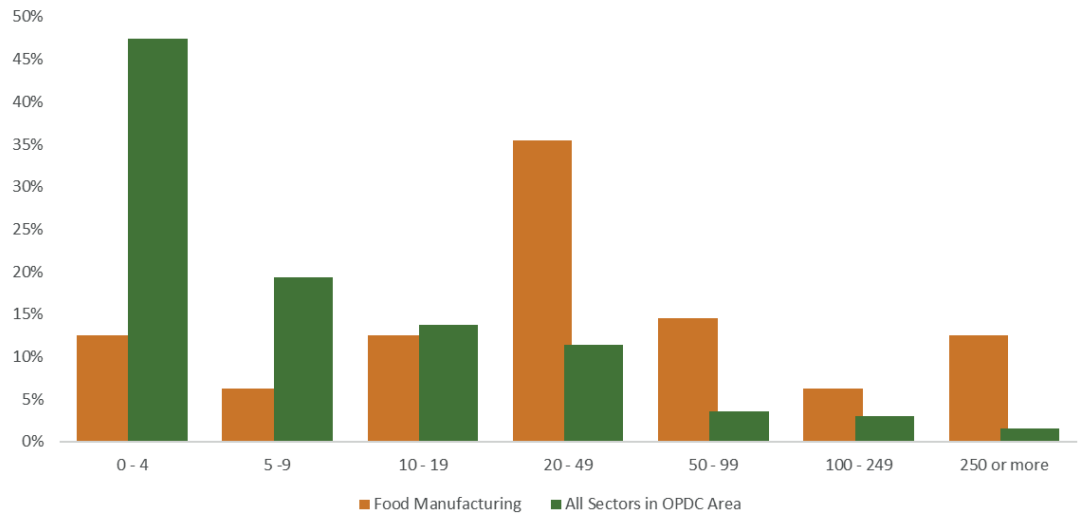
** = Disclosive Data*

4.12 Businesses in the food manufacturing sector in the OPDC area are typically much larger than those in the wider economy. The average businesses employs 126 people, which is much higher than the average for the OPDC area (25).

4.13 Reflecting this, there are a number of large food manufacturing firms in the OPDC area, with six out of 50 firms employing more than 250 staff. Larger employers within the food manufacturing sector include McVities, Bakkavor Foods and Greencore.

4.14 A further 10 firms employ between 50 and 249 staff. As noted previously, the number of smaller businesses is likely to be larger than suggested by ONS data as many of these will fall below the VAT threshold. This is highlighted by evidence in the Park Royal Atlas which identifies a much larger number of food manufacturing micro businesses than identified by ONS.

Figure 4.1 Size of Food Manufacturing Businesses in the OPDC Area

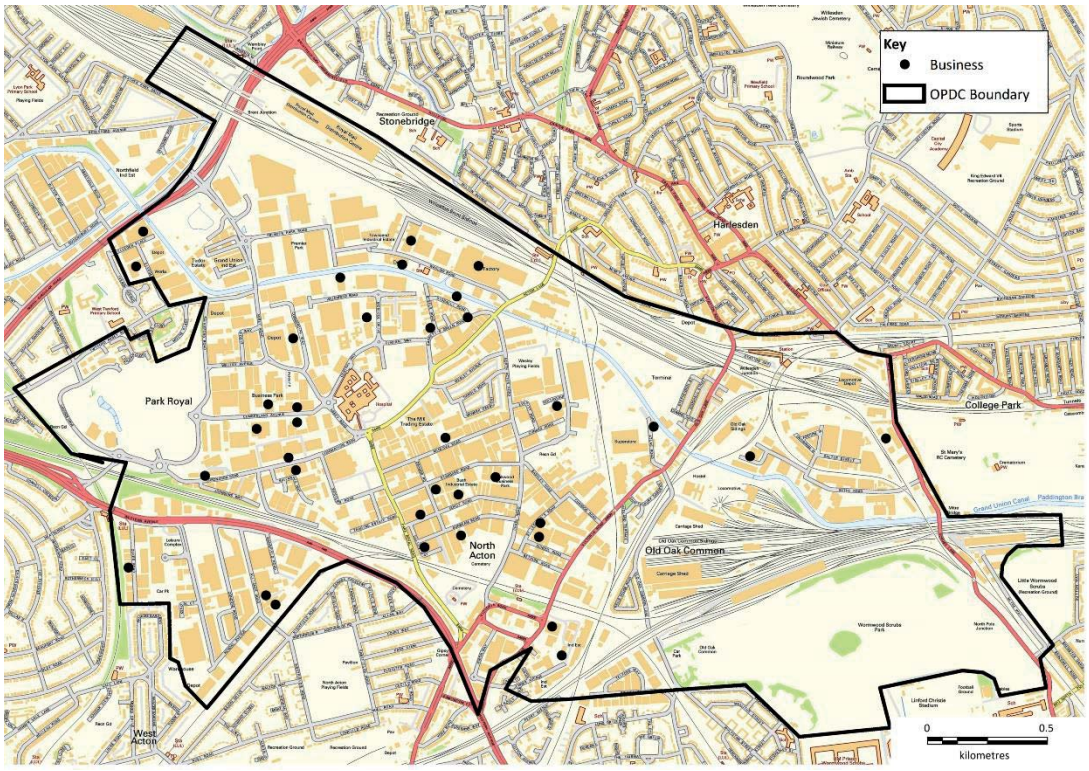


Source: IDBR, 2016

4.15 A large proportion of jobs in food manufacturing are full time, with these accounting for 90% of all employment in the OPDC development area. This is similar to other comparator areas (such as London and nationally), although it is slightly higher in the OPDC region (93%). Consultation has highlighted that in many instances, food manufacturing in Park Royal draws on relatively low skilled labour.

4.16 While food manufacturing business are spread throughout the area, a number of concentrations of activity are apparent. Some of the larger firms are located to the north and west of Park Royal. This may partly reflect proximity to the North Circular Road and hence strong connectivity, but also the presence of some larger and more modern sheds in this area (eg SEGRO's Origin Business Park). Anecdotally, firms are also clustered around the centre of Park Royal (in the area around the Central Middlesex Hospital), where the Dephna Group (specialists in providing workspace for food manufacturing businesses) hosts over 100 small businesses.

Figure 4.2 Distribution of Food Manufacturing Businesses in OPDC Area



Source: ONS IDBR, 2016

4.17 Evidence from the Park Royal Atlas suggests that the majority of food manufacturing workplaces in Park Royal are either large warehouses (around 40), small warehouses (around 20), workshops (around 40). There are also a small number of office activities.

4.18 To help develop the food industry within the OPDC area, the Park Royal Food Innovation Centre was established in 2009 to provide support to SMEs in London's food industry to develop new products and obtain guidance on certification to the recognised standards and food safety management. The Centre had a modern development kitchen, meeting rooms and training suites to help support businesses, with research and advice services offered free of charge. However, after public sector revenue funding came to an end, the Centre is now closed.

4.19 Consultation has suggested that there is currently little in the way of networking or collaboration between food manufacturing businesses within Park Royal, and little awareness of the businesses

who are actually located there. There has also been little effort to market the strength of the sector locally to wider audiences.

Economic Demand

4.20 Employment in the sector has slightly declined since 2009 (-3%), whereas the business base has seen a substantial increase (+67%), albeit from a small base. As noted previously, this suggests growth in the small business base.

4.21 Consultation evidence has suggested that demand from food manufacturing businesses in Park Royal is strong; this is partly demonstrated by the activities of the Dephna Group, which has been investing in new workspace for food manufacturing businesses in Park Royal and which has experienced strong demand for its units. This is particularly the case for smaller businesses either looking to start up in Park Royal or to expand.

4.22 There are a number of drivers for change in the food manufacturing sector across the UK. These include:

- **The growing population** – the UK's population is forecast to reach 71.3 million by 2030, a 15% increase from 2010. This will result in a larger consumer base and therefore more demand for food products.
- **Food and drink trends** – the main trends driving the food sector are luxury and health. Sectors within food manufacturing that have experienced significant growth in recent years (especially in London) include craft alcohol production (with an increasingly large number of small distilleries and microbreweries opening), mineral water production, high-end bakeries, ready meals, food-to-go and the 'free-from' movement. The health agenda is also dictating trends in the food and drink sector, with an increase in demand for localised produce, organic and healthier foods.
- **Technological change** – new methods of production are transforming the food industry, with machines undertaking work that was previously done by labour. Advances in robotics and automation will further drive this transition in the future.
- **Supermarket competition** – a current issue within the food and drink industry is increasing competition for the traditional 'big 4' supermarket giants, with the influx of European discounters including Aldi and Lidl affecting prices in the market. With these chains securing greater market shares, it is putting downward price pressure on the 'big 4' supermarkets which is (to some extent) being passed onto manufacturers.

4.23 Future facing projections forecast strong declines in manufacturing and food manufacturing employment in London in the period to 2041 of up to 30%.

4.24 That said, given Park Royal's current strength in the sector, its strong locational advantage, its designation as Strategic Industrial Land and the ongoing loss of industrial land elsewhere in the city, demand in Park Royal itself is expected to remain strong.

Employment / Economic Opportunities

4.25 Evidence from 'Improve', the Sector Skills Council for the food manufacturing sector finds that the highest demand for jobs occurs across managerial roles and jobs in food science, product development and process, plant and machine operatives. In addition, companies face issues in recruiting food scientists, food nutritionists as well as technologists and engineers with the ability to handle complex bespoke automated systems. The increasing levels of science and technology in

the food industry has seen a move from labour intensive to capital intensive methods of production, requiring people with higher skill levels to operate and maintain complex machinery.

4.26 Food manufacturing has an essential role in feeding London (and the nation). Although, it is not highlighted as priority sector, Government have been investing in a UK wider food manufacturing cluster programme to support specialisation and innovation in the food industry. There are a number of industrial strategy ambitions from the government on sectors parallel to the food manufacturing sector which will have an impact on it. Developments in the agri-tech sector will help to improve innovation in the food industry, with better connections between basic research and applied science to create modern systems that allow farmers to access agri-tech expertise and use innovative techniques. The Government spent £450 million in 2011/12 on agri-food research and development (R&D)[10].

4.27 In addition, there are a number of ambitions to increase productivity in the manufacturing sector (see advanced manufacturing sector for more detail) with the government seeking to ensure UK manufacturing remains competitive in the global economy by taking advantage of robotics, integrated sensors and IT/cloud computing which are central to the 4th industrial revolution (Industry 4.0)[11].

Spatial Requirements

4.28 As noted above, business sizes in the sector in the OPDC area vary significantly. There is an average size of 126 employees – significantly higher than average for the area, and reflecting the presence of a number of large employers.

4.29 Consultation suggests that food manufacturing businesses prefer to be located in industrial estates and on strategic mixed-use sites.

4.30 The workspace typologies within the sector are varied – from large factories (B2), to warehouses and lighter industrial units (B1c), down to the micro level (eg shared kitchens). Facilities which are generally seen as being important include kitchens for preparing and development purposes, warehouse space to store supplies and / or the finished product, refrigerated areas to store fresh/frozen produce and access to utilities (such as water and electricity).

Spatial Evidence from the Park Royal Atlas

As noted above, businesses in the food manufacturing sector are typically larger than average; that said, the Park Royal Atlas highlighted that there are also a large number of micro-businesses in the sector. Average floorspace by workspace is estimated at 2,400 sqm – second only to transport and logistics in Park Royal.

Businesses in the food manufacturing sector typically require a large floorspace per employee. As noted above, evidence from the Park Royal Atlas suggests that the majority of food manufacturing workplaces in Park Royal are either large warehouses, small warehouses or workshops. Typical use classes for such units are likely to be B1c or B2. HCA guidance[12] suggests that these industrial uses typically have employment densities of 47m2 and 36m2 per FTE respectively; however, evidence from the OPDC Industrial Land Study suggests that higher densities for industrial space of up to 20m2 per FTE could be achieved within the OPDC area (e.g. within an Industrial Business Park or as part of future mixed use development).

[10] HM Government, 2012, A UK Strategy for Agricultural Technologies

[11] HM Government, 2015, Strengthening UK manufacturing supply chains: An action plan for government and industry

[12] HCA Employment Densities Guide, 2015

Consultation has suggested that demand is particularly strong for small industrial units, which are partly fitted out and which allow for flexible use and future expansion. The Dephna Group has invested in such units in recent years and has experienced strong demand.

4.31 Consultation has highlighted the importance of appropriate parking and loading facilities and space to accommodate larger HGVs. This is a current weakness of the Park Royal area, with only the more modern facilities providing appropriate space (eg SEGRO's Origin estate).

4.32 One of the key needs of businesses in the food manufacturing sector is excellent access to suppliers (e.g. wholesale, or proximity to agriculture) and access to key markets for selling products – particularly for businesses involved in food processing. Park Royal's concentration of activity in this sector shows that it already has a very good location for this. Firms will generally seek sites in close proximity to strategic roads, to reduce journey times.

4.33 Low rental costs are generally a consideration for food manufacturing businesses – but in many cases, proximity to market is a more important consideration.

4.34 Consultation has suggested that, while there is an advantage in certain food processing firms being close to other food manufacturing businesses they may be supplying, food manufacturing businesses do not typically show a propensity to cluster together, nor to collaborate / network when they are in proximity.

Other Supporting Requirements

4.35 Food manufacturing firms producing fresh produce on a daily basis (e.g. sandwich makers) need to be as close as possible to their market to reduce journey times and therefore increase the freshness of the product. For these firms, affordability is less of an issue, and they are usually prepared to pay a premium for sites close to large markets (such as Park Royal).

4.36 Firms not producing fresh produce have less of a need to be close to their markets as produce can be stored in warehouses and transported over long distances to its consumer. For these firms, affordability is more of a concern, given that their location is not critical. This may impact on Park Royal given rising rental values in recent years, and some firms may look elsewhere for cheaper premises further outside of London.

4.37 For businesses starting in the food manufacturing sector, they often need support understanding the recognised safety and hygiene standards, as well as needing development kitchens to develop products. The Park Royal Food Innovation Centre formerly provided some of this advice, but is now closed.

4.38 The Sector Skills Council for the manufacturing sector ('Improve') highlights that certain businesses in the sector are facing difficulties in attracting skilled and experienced applicants for jobs. The general image of the food sector is contributing towards a lack of interest in careers in the industry[13]. This image is characterised by:

- Low paid manual labour in agriculture, with vacancies filled by migrants
- Food factory labour intensive production lines
- Low paid food service sector employment (shop staff, waiters etc)
- A labour intensive, non-mechanised, non-technical industry

4.39 This image is not representative of the sector as a whole, which is also characterised by R&D and the use of leading edge technology in the production, processing and distribution of food on a

[13] Improve – National Skills Council for Food and Drink, 2012, Sector Skills Needs Assessment

global basis. The traditional image of the sector has impacted upon low take-up by students pursuing food degrees which is worrying given that employment demand will be boosted with almost half the current workforce being eligible for retirement over the next two decades.

4.40 To add to the increasing demand for skills, new and emerging technologies are changing the requirements in workforce skills. The traditional roles of factory operatives, maintenance engineers, process and engineering designers, and food scientists and technologists are set for rapid change. Advances in engineering design, computer process control, fault diagnosis and communication are changing the knowledge needs of process operatives. Maintenance engineers also need to develop new skills and be proficient in, for example, the safety aspects of technologies such as microwave heating, aseptic processing, supercritical carbon dioxide and laser sealing.

Learning from Elsewhere

4.41 While Park Royal is arguably the UK's leading cluster of food activity, there are a number of other clusters in the UK which provide learning points:

- The food manufacturing sector in the UK is competitive, and numerous locations are currently exploring options to develop food clusters or specialisms. One example is the North Lincs Food Manufacturing Cluster Programme, via which the Greater Lincs LEP (with investment from the governments Regional Growth Fund) has aspirations to develop the UKs leading food manufacturing cluster. Based at the Lincoln Science and Innovation Park, the cluster has HEI links with a key focus on driving innovation in food businesses. This example highlights that the food manufacturing industry is evolving away from its more traditional image, with businesses needing to invest to stay ahead. It could also start to demonstrate the potential benefits of clustering.
- A further example which demonstrates the evolution towards innovation and technology is the North West Food Research Development, located on the main campus at the University of Chester. The project was co-funded by the European Union and the University of Chester and provides a new state of the art research and development facility, acting as a centre of excellence for food science and technology for producers across the region. Facilities provided include development kitchens, incubator space, lab space, meeting rooms, hot desk facilities. This is an example where business support is also available.
- Spa Terminus in London (http://www.spa-terminus.co.uk/) provides an example of where food manufacturing and distribution businesses have been encouraged to cluster to bring lower value industrial space (such as railway arches) into productive use and to pursue longer term place making objectives. Southwark Council and Network Rail have worked together to encourage like-minded business to locate, with certainty provided by medium term leases. Many of the businesses are local in their focus, supplying London's restaurants and cafes. Many of the businesses open their doors to consumers at the weekend, which has helped to establish the area as a hotspot on the London food circuit. This has swiftly helped to transform perceptions and use of a previously little visited area.

4.42 More detail on relevant sector case studies, including location, spatial characteristics, future aspirations and is provided in Appendix A.

Future Opportunities for Old Oak Royal and Park Royal

4.43 Food manufacturing is already well established in the OPDC area and it already produces and processes 30% of all the food consumed in London[14]. While at headline level the sector is projected

[14] Evidence from Park Royal Partnership, http://www.foodprocessing-technology.com/projects/parkroyalfoodinnovat/

to decline across London in the future, there will continue to be a need for food manufacturing businesses to be located close to markets and with strong transport connectivity in locations such as Park Royal.

4.44 With this in mind, Park Royal appears well positioned to continue to act as a hub for activity in the sector given its existing competitive advantage and the pressure on industrial land elsewhere in London. In this case it is likely that food manufacturing activity is likely to increase in the future.

4.45 There are a number of opportunities to diversify the sector within the OPDC areas in the future:

- Food research and innovation– the food sector is continually evolving and innovating both in terms of the production process and also the products. Building on the existing food sector strength, proximity to research institutions and future transport enhancements, there could be potential for the OPDC area to a more leading role in food research and innovation
- Development of artisan / craft food manufacturing sector – there is strong potential to further develop niche / artisan food manufacturing activities in the OPDC reflecting London wide demand and growth in these activities
- Embedding the food sector within place making aspirations – linked to the above, the food sector has strong place-making potential. Embedding the sector (craft manufacturing, retail and consumption) within new developments could serve a twin purpose of helping to create sense of place and identity and also supporting renewal of the sector locally
- Supporting the development of the Circular Economy – the food sector has strong potential links to the circular economy, including the potential to use food waste to create energy and mediums for growing
- Growing communities – potential to develop wider activities linked to the food sector and circular economy, such as community growing projects.

4.46 Recommendations on how the sector can be supported – including the locations where growth might be expected – are provided in chapter 6.

Transport, Logistics and Wholesale

4.47 The transport, logistics and wholesale sector covers a number of sectors across the economy, including transport, warehousing and wholesale. The sector plays an important role in ensuring that other sectors in the economy are able to function through the movement of goods and components.

4.48 The sector has close cross linkages with a number of other sectors –most directly manufacturing and retail.

Table 4.3 Key Statistics for Transport and Logistics in the OPDC Development Area

	Year	**Metric**
Employment	*Number – 2014*	12,900
	Concentration	25% of all jobs; LQ vs London = 3.1
	Change (2009-14)	+54%
Businesses	*Number – 2015*	520;
	Concentration	23% of all businesses; LQ vs London = 3.4
	Change (2010-15)	+9%

Source: ONS BRES (2014) & ONS UK Business Count (2015)

Current Size and Characteristics in OPDC Area

4.49 The transport, logistics and wholesale sector accounts for 12,900 jobs in the OPDC development area and 520 businesses. These account for nearly a quarter of all businesses in the area (23%).

4.50 The sector is highly specialised locally, with nearly triple the concentration of employment and businesses compared to London.

Transport, Logistics and Wholesale: Observational Analysis

Evidence contained within the Park Royal Atlas suggests that there are around 400 active transport, logistics and wholesale businesses in Park Royal, covering 620,000 sqm of floorspace. This is a lower number of businesses than suggested by ONS data, which may partly reflect methodological differences, including differences in the way that sectors have been categorised.

Despite the discrepancy, both datasets allow the conclusion that transport, logistics and wholesale is one of Park Royal's key specialisms, and a sector which distinguishes it within the London context.

4.51 ONS evidence suggests that there has been very strong growth in the employment base in recent years (+54%), and also growth in the business base (+9%). The difference in these figures suggests that growth has been focused among the larger employers. Employment growth has been strong across the component parts of the broad sector.

4.52 The transport and logistics sector produces over £1 billion Gross Value Added per annum. The sector performs relatively well in terms of productivity, with GVA per FTE of £79,300, which is considerably higher than produced per worker across the whole economy (£60,500). Within the sector warehousing and logistics has the highest GVA per worker (£85,400), followed by transport (£79,700) and wholesale (£76,500).

4.53 Sub-sectors in the transport and logistics sector which have a high presence in the OPDC development area include warehousing and storage facilities (1,900 jobs with an increase of 132%

since 2009), wholesale of alcoholic beverages (1,800 jobs with an increase of 314% since 2009) and the wholesale of TVs and electrical household appliances (with jobs increasing by 1,638% since 2009). The strength of these reflects the role that the area plays in supplying London and this could be expected to continue in the future.

4.54 While not disaggregated within the ONS data, the Park Royal Atlas identifies a number of more creative activities taking place within Park Royal's warehouses and sheds – including numerous prop houses and storage facilities supporting London's film and media sector. Creative activities are considered in more detail later in the chapter.

Table 4.4 Largest Sub-Sectors in **Transport & Logistics** by Employment in the OPDC Development Area

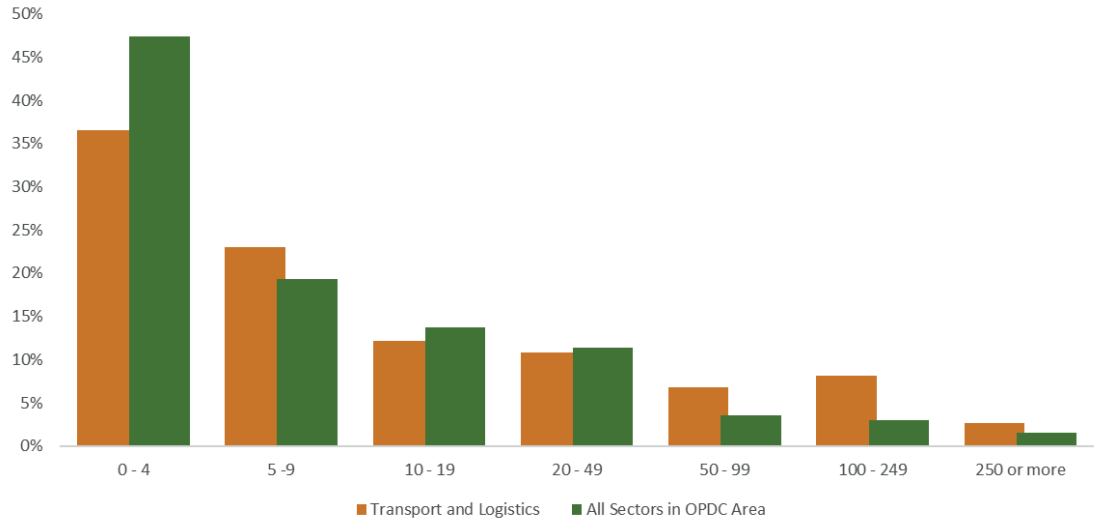
Sub-Sector	SIC Code	No of Employ.	LQ	Employ Change
Operation of warehousing and storage facilities for land transport activities of division	52103	1,900	13.6	+132%
Wholesale of wine, beer, spirits and other alcoholic beverages	46342	1,800	22.3	+314%
Wholesale of radio and television goods and of electrical household appliances	46439	*	37.1	+1638%
Urban, suburban or metropolitan area passenger land transport other than railway transportation by underground, metro and similar systems	49319	1,100	2.5	+61%
Non-specialised wholesale of food, beverages and tobacco	46390	1,000	7.4	+33%
Postal activities under universal service obligation	53100	900	3.8	+48%
Other transportation support activities	52290	500	2.8	+94%
Removal services	49420	300	11.3	+37%
All Transport & Logistics	-	*12,900*	*3.1*	*+54%*

Source: ONS BRES, 2014

** = Disclosive Data*

4.55 As noted previously, businesses in the transport and logistics sector are typically larger than businesses across the whole OPDC economy, with the average business employing 35 staff compared to an average of 25 staff across all sectors. There is a higher presence of large businesses within the sector, with 11% of businesses employing more than 100 employees compared to 5% in the OPDC area. This includes eight employing over 250 people and 15 employing between 100 and 249.

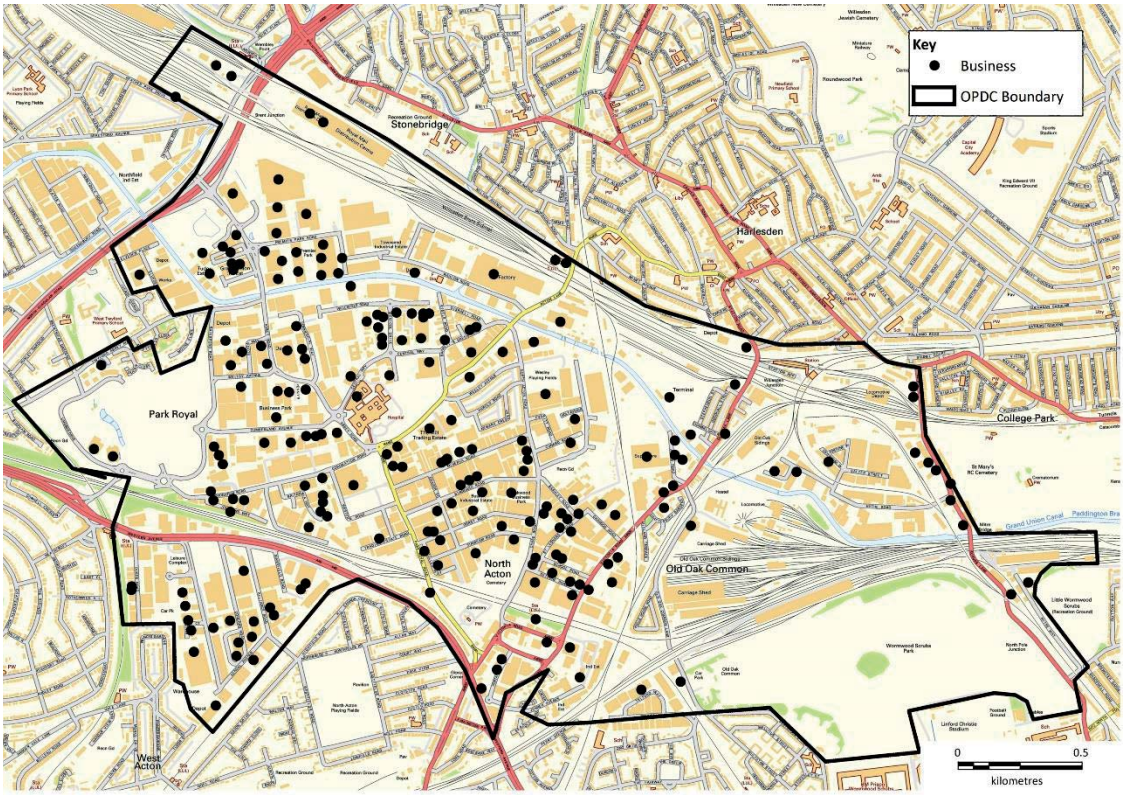
Figure 4.3 Size of Transport and Logistics Businesses in the OPDC Area



Source: IDBR, 2016

4.56 While transport, logistics and wholesale businesses are spread throughout the area, a number of concentrations of activity are apparent. Most large businesses in the sector are concentrated in two areas: along Victoria Road (southern section) and around Premier Park and Abbey Road (to the north west of the OPDC area). Both of these areas provide good access to the A40. Key employers include John Lewis distribution, Ocado and Royal Mail.

Figure 4.4 Distribution of Transport and Logistics Businesses in OPDC Area



Source: ONS IDBR, 2016

4.57 Evidence from the Park Royal Atlas suggests that the majority of transport, logistics and wholesale workplaces in Park Royal are either large warehouses (around 160) or small warehouses (just under 100), workshops. There are also just over 100 office workspaces (largely small offices).

4.58 Jobs in the transport and logistics sector in the OPDC development area largely tend to be full time, accounting for 91% of all jobs. This is a much higher proportion that experienced across the OPDC region (79%), London (88%) and nationally (85%). Consultation has suggested that many of the jobs provided within the sector are jobs requiring lower levels of skill.

Economic Demand

4.59 The sector has experienced strong growth over the last five years, with employment increasing by 54% (4,500 jobs) and the business base increasing by 9%. This growth in employment is much higher than experienced across London (+7%).

4.60 At the macro level, expansion is expected in the transport and logistics sector in the future with higher volumes of freight and more extensive inventories as manufacturing and retail sales continue to grow.[15] The transport and logistics sector largely mirrors changes in retailer and consumer behaviour, with the recent growth of e-commerce in retail changing the nature of the sector.

4.61 Technological adaptation is expected to be one of the key drivers of the transport and logistics sector in the future, making the sector more efficient in delivering to the end customer, be it Business to Business (B2B) or Business to Consumer (B2C). Vehicle and driver performance data integration is becoming increasingly important in this regard. This is a means of improving fuel consumption and reducing emissions of carbon, ultimately making logistics operations more efficient. Smart logistics and technology within the warehouse itself is also increasingly important.

4.62 Other developments which may impact on the sector include driverless lorries and unmanned aerial vehicles (drones) which may transform the sector in the future. Further advancements in 3D printing may also alter market demand, creating new markets for transport and logistics firms.

4.63 Another important driver of industry is the expansion of social media and online shopping. These factors are causing supply chains to be reconfigured (e.g. near sourcing and reshoring, by moving centre of production closer to consumers). The reintroduction of some manufacturing processes to the UK has been identified as a possibility for sectors including textiles, computer manufacturing and electronics, amongst others. While the trend is still in the very early stages, if it does progress it represents a huge opportunity for the transport and logistics sector. It will be important to ensure that transport infrastructure is globally competitive to absorb this demand.

4.64 More than half of transport and logistics CEOs are still concerned about a wide range of issues that can constrain future growth[16]. The most citied threats to future growth are: slow growth in developed economies, volatile energy costs, over-regulation and increasing tax burden.

4.65 At the London level, future facing projections forecast declines in transport, logistics and warehousing employment in London in the period to 2041 of between 4% and 14%. That said, as with other industrial activities, given existing strengths in the sector, locational advantages, designation as SIL, and the accelerated loss of industrial land elsewhere in London, demand for logistics space in Park Royal is expected to remain relatively strong.

[15] IbisWorld (July 2015) Warehouse and Storage in the UK

[16] FTA and PwC (2014), The Logistics Report 2014

Employment / Economic Opportunities

4.66 At present, the majority of jobs within the transport and logistics sector are associated with warehouse support staff, machine operatives and delivery drivers. However, technological and commercial developments are placing an increased emphasis on higher skilled jobs, with demand for those able to undertake innovation in the sector to improve its efficiency.

4.67 The increasing demand for last mile distribution centres means that there will always need to be a location within London to facilitate this. Park Royal is one of a few sites in western London which has large warehouses available for last mile distribution centres.

4.68 Consultation suggests, however, that Park Royal's position as a regional distribution centre is under strong competition from other industrial estates around London including London Riverside, Upper Lee Valley, The Bridge (Dartford), and Heathrow Logistics Park, due to the high cost of land in the area, congestion, and the availability of space at other sites. This may be something which affects the composition of the sector in Park Royal. However, the need for transport and logistics firms to be close to businesses and customers means that it is likely continue to have a strong presence in the area.

Spatial Requirements

4.69 As noted above, business sizes in the sector in the OPDC area vary significantly. On average, businesses employ 35 employees, which is higher than average for the wider area, and has a higher than average number of very large employers.

4.70 Sites within this sector are typically found in industrial estates and local industrial sites, and are close to the strategic road network. Generally speaking, space demands are highest for modern logistics firms, and much smaller for local wholesale activities (typically operating out of small sheds / warehouse units).

4.71 The logistics sector is characterised by lower employment density sites, with a typical unit requiring between 70-95 sqm per employee[17]. This depends on the purpose of the distribution centre, with national distribution centres requiring 95 sqm per employee, regional distribution centres requiring 77 sqm per employee and 'final mile' distribution centres requiring 70 sqm per employee. Current logistics firms in the OPDC area are a mixture of regional and 'final mile' distribution centres. Most of these are large sites with purpose-built facilities. As this suggests, space requirements within the sector vary significantly according to the nature of the business and the market being served.

Spatial Evidence from the Park Royal Atlas

As noted previously, businesses in the transport and logistics sector in the OPDC area are typically larger than businesses across the whole OPDC economy, with the average business employing 35 staff, compared to an overall average of 25 staff across all sectors. There is a higher presence of large businesses within the sector, with 11% of businesses employing more than 100 employees compared to 5% in the OPDC area.

As noted previously, evidence from the Park Royal Atlas suggests that the majority of transport, logistics and wholesale workplaces in Park Royal are either large warehouses (around 160) or small warehouses (just under 100), workshops. There are also just over 100 office workspaces (largely small offices).

[17] HCA, 2015, Employment Density Guide

Based on information in the Park Royal Atlas, average floorspace by workplace for logistics businesses is estimated at 2,500 sqm – the highest of any sector. Average floorspace by workplace for wholesale activities is much lower at 1,200 sqm.

4.72 Firms within the transport, wholesale and logistics need very good access to the two groups with which they typically interact: producers and consumers. To enable them to easily access both groups, many demand space that is within close proximity of the strategic road network. Also required are premises which allow appropriate space for loading activities and or parking.

4.73 Consultation has suggested that logistics businesses do not typically show a propensity to cluster together, nor to collaborate / network when they are in proximity.

4.74 Consultation has suggested that current weakness for Park Royal include congestion levels within the estate, and in many cases lack of space for loading / parking reflecting the historic spatial evolution of the estate.

Other Supporting Requirements

4.75 The relatively high GVA produced per worker means that firms within the transport and logistics sector are better able to afford higher rents. However, the high space requirements of the sector (especially for storage) may present issues if rents continue to rise in the OPDC area.

4.76 The technological and commercial developments for the transport and logistics sector mean that new and more highly skilled workers are needed. Employment across the UK Logistics sector is expected to increase by 10% over the period 2010-2020, equal to an additional 917,000 workers.[18] Research undertaken by the UK Commission for Employment and Skills identified that logistics operators consider that the implementation of technological systems creates a competitive edge. These typically require expert knowledge or specialised skills in IT and analytics.[19]

4.77 Data from the Annual Population Survey (2012) looked at the age profile of particular skills in the transport and logistics sector. It found that the logistics workforce is an ageing one, with a very low proportion of workers aged under 25. Over half of a firms surveyed in the Skills for Logistics, Employer Skills Survey (2013) noted that recruitment difficulties were a consequence of a low number of applications with the required skills.

4.78 A shortage of Light Goods Vehicles drivers has also been an issue for the sector, especially at peak times (e.g. the build up to Christmas) where volumes of last mile logistics increase dramatically.

Learning from Elsewhere

4.79 While Park Royal is an important transport and logistics hub, there are a number of other clusters in the UK which provide further evidence on the needs and demands of the transport and logistics sector. These include the Bridge at Dartford, and Heathrow Logistics Park. Both of these case studies provide good examples of space developed to meet the modern needs of the logistics sector, and demonstrate the importance of excellent connectivity (access to the strategic road network) and working closely with businesses to ensure that units provided meet needs. They also exemplify some of the strong completion for logistics activities within the south-east context.

4.80 Information on both of these case studies is provided in the Appendix A.

[18] FTA and PwC (2014), The Logistics Report 2014

[19] UK Commission for Employment and Skills (October 2014) Understanding Skills and Performance Challenges in the Logistics Sector

4.81 Also relevant are the new high tech distribution centres being developed across the UK, where warehouses use sophisticated automation software and robotics to process incoming orders and pick products for outbound deliveries. At the Andover Business Park for example, the new Ocado customer fulfilment centre uses 4G technology to allow over 1,000 robots to communicate with each other. Despite automation, employment is still high, with over 700 employees on site.

Future Opportunities for Old Oak Royal and Park Royal

4.82 The transport, logistics, and distribution sector is one of Park Royal's core strengths and specialisms which mark it out within the London context.

4.83 At the London level, future facing projections forecast declines in transport, logistics and warehousing employment in London in the period to 2041 of between 4% and 14%. That said, as with other industrial activities, given existing strength in the sector, locational advantages, designation as SIL, and the accelerated loss of industrial land elsewhere in London, demand for logistics space in Park Royal is expected to remain relatively strong.

4.84 There are a number of opportunities to diversify the sector within the OPDC area in the future, largely focused on processes:

- Consolidation and automation – there is a move in the sector towards consolidated logistics centres, which focus distribution activities for a defined area through a single point. Automation and wider technological innovation is playing an increasingly important role in these centres.
- Changes in modes of transport – wider changes are possible in the way that goods are moved into and around the area. This might include more intelligent sharing of vehicle space to enhance efficiency, and better use of rail and water assets in the area for movement of goods. Both have the potential to deliver sustainability benefits, while also addressing congestion on the road network. In the longer term (10 years plus) automated vehicles are also likely to have a significant influence on how distribution activities are undertaken.
- Supporting the development of the Circular Economy – linked to the above, the transport and logistics role has an integral role to play in the Circular Economy, ensuring that goods vehicles both leave and return to the area fully loaded (eg bringing packaging back for recycling / reuse).

4.85 Evolution of transport related sectors may be forced by the need to achieve the Mayor's and EU targets for carbon reduction. There could be opportunities to inspire the transport and logistics sector to evolve in the OPDC area, sending signals to the market that the area is a place of adaption and innovation. This could be achieved via the piloting of new technologies and ideas.

4.86 Recommendations on how the sector can be supported – including the locations where growth might be expected – are provided in chapter 6.

Motor Trades

4.87 The motor trades sector covers the sale, maintenance and repair of motor vehicles. This includes the sale of new and used vehicles.

Table 4.5 Key Statistics for Motor Trades in the OPDC Development Area

	Year	**Motor Trades**
Number of Jobs	*2014*	**1,700**
Number of Businesses	*2015*	**120**
Employment change	*2009-14*	**+6%**
Business change	*2010-15*	**+10%**
Employment LQ vs London	*2014*	**4.7**

Source: ONS BRES (2014) & ONS UK Business Count (2015)

Current Overview

4.88 The motor trades sector is a large constituent part of the broadly defined retail sector in the OPDC development area, accounting for 30% of retail jobs (1,700 jobs). It has nearly five times the concentration of activity in the OPDC development area compared to across London (location quotient = 4.7), reflecting a strong presence in the area. These jobs are spread across around 120 businesses.

Motor Trades: Observational Analysis

Evidence contained within the Park Royal Atlas suggests that there are a higher number of active 'vehicle sale and repair' businesses in Park Royal, with around 215 active workplaces recorded covering around 185,000 sqm of floorspace. This is a higher number of workplaces than any other sector.

The discrepancy in numbers between the two data sources is likely to reflect the fact that some of the smaller businesses / enterprises are sometimes excluded from ONS figures as they are below the VAT threshold.

Despite the discrepancy, both datasets allow the conclusion that motor trades are an important activity within Royal.

4.89 ONS evidence suggests that there the sector has performed well in recent years with growth in the employment and business bases of 6% and 10% respectively.

4.90 In terms of sub-sectors, the sale of used cars and light motor vehicles has a very strong presence in the OPDC development area, with a location quotient of 10.1. This sub-sector has grown by over a third in the last five years (+35%) and now accounts for around 20 businesses. Consultation has also highlighted the importance of this sector spatially: Car Giant for example owns and part occupies a 47-acre site.

4.91 Maintenance and repair is also an important sub-sector. While this is often portrayed as a relatively low value and 'dirty' use, consultation has highlighted that Park Royal is home to a number of 'higher end' and luxury motor trade activities which contradict this traditional image.

Table 4.6 Largest Sub-Sectors in **Motor Trades** by Employment in the OPDC Development Area

Sub-Sector	SIC Code	No of Employ.	LQ	Employ Change
Sale of used cars and light motor vehicles	45112	*	23.4	+35%
Maintenance and repair of motor vehicles	45200	700	3.5	-6%
Sale of new cars and light motor vehicles	45111	200	2.5	+1%
All Motor Trades	-	*1,700*	*4.7*	*+6%*

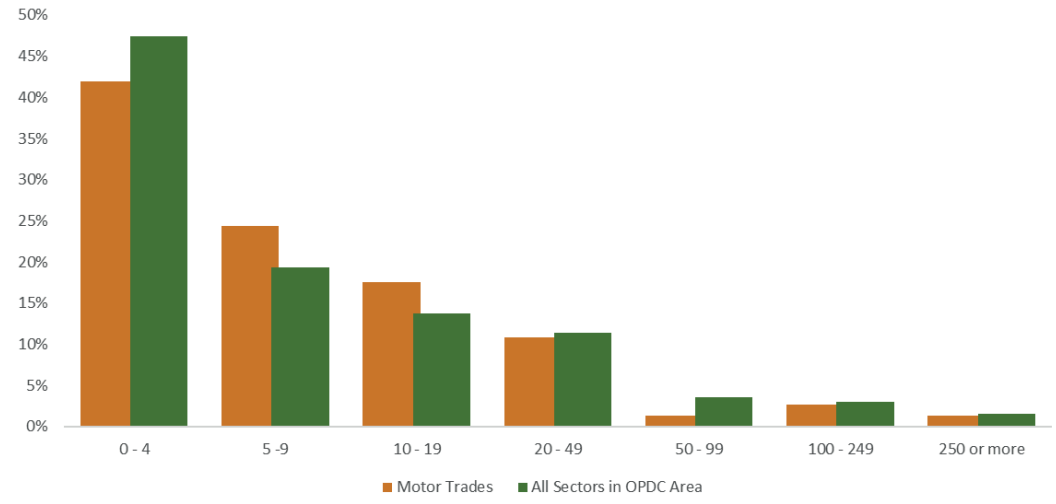
Source: ONS BRES, 2014

** Disclosive Data*

4.92 The motor trades sector contributes £69.7 million to the OPDC development area economy per annum. GVA per worker in the motor trades sector is considerably below the rest of the economy, and is approximately £39,900 per worker. This is much lower than the average produced across other sectors (£60,500).

4.93 Businesses in the motor trades generally employ slightly fewer people, with the average business having 22 employees compared to 25 across all sectors. However, the distribution of business sizes is slightly different to the wider economy, with a higher proportion of business employing between 5 and 19 people (42%) compared to the wider economy (33%). By comparison, with the exception of Car Giant there are no businesses employing more than 249 people, only three employing more than 50 staff.

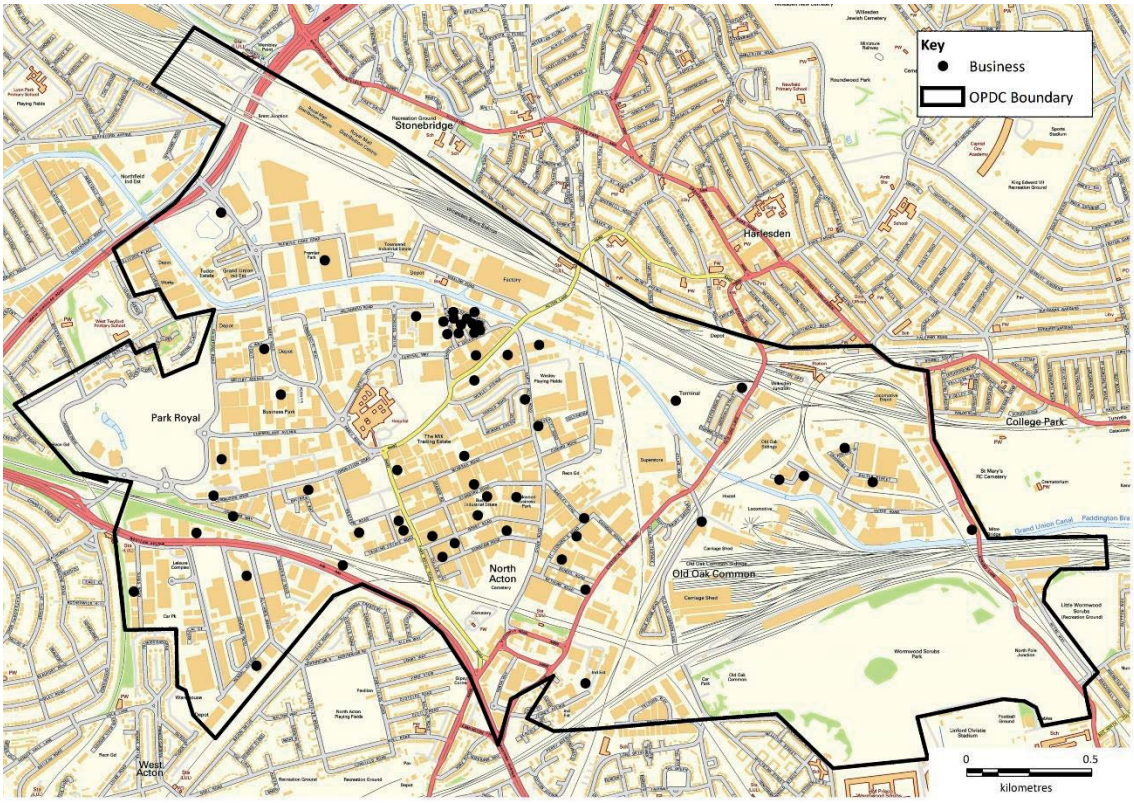
Figure 4.5 Size of Motor Trades Businesses in the OPDC Area



Source: IDBR, 2016

4.94 Motor trade activities are located across Park Royal. The most significant business in terms of size and land take is Car Giant on Hythe Road to the east of the area, currently the largest single land use by a business within Park Royal. However, it should be noted that there are proposals for the redevelopment of the Car giant site, which forms a major part of the Old Oak North development area.

Figure 4.6 Distribution of Motor Trades Businesses in OPDC Area



Source: ONS IDBR, 2016

Economic Demand

4.95 Within the OPDC Development Area, employment in the motor trades sector has increased over the last five years, which is very much against the trend experienced elsewhere in London. Employment has grown by 6% in the OPDC development area compared to a fall of 11% in the West London Alliance and an 18% fall across London. Nationally employment in the sector has increased by 10%.

4.96 There has also been business growth over the last five years, with a 10% increase in the business base. This is lower than experience in the West London Alliance (+29%) and London (22%), but similar to the national increase (10%). The falling employment and increasing business base across London suggest that the sector is moving towards smaller businesses and self-employment.

4.97 In many cases, the key drivers affecting the motor trade sector are wider macro-economic forces which influence disposable income and hence car sales. While technology and automation is becoming increasingly important in the sector (eg increasing importance of computers and electrical circuits in cars and in the longer term driverless technology), these are factors which are not currently thought to be influencing the types of motor trades which are located within Park Royal. That said, in the longer term (ten years plus), automation has the potential to have a transformative impact on the motor trade sector. If automated vehicles are operated/serviced by companies in large fleets, this is likely to reduce demand for space from individual car dealerships and motor repair activities.

4.98 Economic projections are not available for motor trades, but consultation has highlighted that there will be an ongoing demand for new and used cars, and ongoing need for vehicles to be serviced. It also highlighted a growing trend of motor trade uses being pushed out of more central

parts of London as values increase and traditional locations for such uses, such as railway arches and industrial estates, are redeveloped.

Employment / Economic Opportunities

4.99 Typical occupations in the motor trades sector include administrative and secretarial, skilled trades and sales and customer service occupations. These account for a wide range of jobs including car mechanics, administrators and car sales advisors.

4.100 The Institute of the Motor Industry (IMI) is the Sector Skills Council for the automotive retail industry. It produced a sector needs assessment of the industry in 2009[20], finding that the public image of the sector was poor which has contributed to employers finding it hard to attract high calibre staff.

4.101 The sector is characterised by the high proportion of skilled trade staff who require specific sector-related technical skills. Because new technology is released into such a high paced environment, the market is in constant need of skilled trade staff to update their knowledge and skills. This also necessitates a need for high level problem solving skills. The sector has a much higher proportion of people with Level 3 and apprenticeship qualifications compared to other sectors[20].

4.102 The motor trades sector also has a high proportion of managers and senior officials creating high demand for management and leadership skills. The type of management skills required is largely dependent on the size and type of business. The sector has a high proportion of micro businesses with the skills requirement for an owner/manager being different to that of a manager working in a vehicle dealership for example.

Table 4.7 Types of Jobs within the Motor Industry

Occupational Group	Job Role Examples	% of workforce in group nationally	Skill Levels Required
Associate Professional and Technical	Master technician, Engineering technician, Auctioneers, Workshop controller	5%	Level 3/4
Administrative and Secretarial	Receptionist, Service Administrator, Warranty Administrator, Personal Assistant	12%	Level 2
Skilled Trades Occupations	Service technician, Diagnostic technician, Fast Fit technician, Auto electrician, Roadside recovery technician	34%	Level 2/3
Sales and Customer Service Occupations	Sales advisor, Customer service advisor, Parts advisor	14%	Level 2
Process Plant and Machine Operatives	Tyre technician, Windscreen Fitter	9%	Level ½
Elementary Occupations	Vehicle valeter /cleaner	7%	Level 1

Source: The Institute of the Motor Industry, 2009, Skills Priorities for the Automotive Retail Sector England

4.103 The sector is not seen as a priority for London, especially given the emphasis placed on reducing carbon emissions across the capital and rising public transport usage. Firms within the sector increasingly struggle to find appropriate locations within London, given the high floorspace requirements of showrooms, environmental concerns for garages and high overheads of space[20]. Firms are moving out of central areas, and the recent growth in employment within this sector in

[20] The Institute of the Motor Industry, 2009, Skills Priorities for the Automotive Retail Sector England

the OPDC development area, suggest that the area is increasingly favoured for businesses in the sector.

Spatial Requirements

4.104 As noted above, business sizes in the sector in the OPDC area vary significantly; there is an average size of 22 employees – slightly lower than average for the area. While there are a large number of micro businesses, these number may be skewed slightly by the presence of Car Giant – a very large employer.

4.105 Spatial requirements for motor trade businesses vary significantly – particularly between new and old vehicle sale uses and vehicle repair uses.

4.106 For the former, the typical size for a multi-franchise dealership at the higher end of the market, would comprise a new building subdivided into two double-height franchise display showrooms of 400m2 each, with additional office and ancillary space giving a gross internal floor area of 1,340m2[21]. New car showrooms need to be located on highly visible sites with good access to main transport routes and an eye-catching frontage. The display of the cars is important in attracting passing trade, with the layout and orientation of sites and display areas having a major impact on sales. The current trend within the sector is for a double-height display area with the main frontage in full-height glazing, making a design statement and providing high visibility. These uses would typically be classed as sui-generis.

4.107 Slightly different are used-car businesses. While visible sites are still a consideration and benefit, this is often deemed less important than for new car showrooms. Used car sites often occupy larger sites which have outdoor space for large numbers of vehicles. Car Giant is the obvious example in Park Royal, albeit to a certain extent an outlier in terms of its size. These uses would typically be classed as sui-generis; given the larger space requirements, employment density is likely to be lower than for new car salesrooms.

4.108 Motor repair uses tend to occupy much smaller premises and are often lower grade in quality. Price pressures are a key factor in this respect. These uses would typically be classed as either B2 or sui-generis. Employment density is likely to be higher than for car sales uses, given the greater cost pressure and reduced need for space.

Spatial Evidence from the Park Royal Atlas

The Park Royal Atlas suggests that vehicle sales and repair activities current account for around 210 workplaces, providing 185,000 sqm of space. This equates to an average of 860 sqm per workplace. The most common workplace category identified is workshops, with some a smaller number of motor trades located within small and large warehouses, and yards.

Other Supporting Requirements

4.109 The main requirements for motor trades uses are locational – including good levels of accessibility and proximity to markets. In the case of new car dealerships, this will mean being situated on or close to strategic routes throughout a city, while for used car dealerships, access to large sites at a good price will be more important. Repair activities are more price sensitive; location may reflect historical / convenience factors for business owners.

[21] Building.co.uk; 2007, Issue 10, Cost Model: Car Showrooms

4.110 Given the increasing cost of premises across London, and restricted supply of land, protecting industrial space for these uses is likely to be the key supporting requirement.

Future Opportunities for Old Oak Royal and Park Royal

4.111 While not a key sector in terms of absolute quantum of employment, Park Royal plays an important sub-regional role in accommodating motor trade activities.

4.112 While economic projections are not available for motor trades, consultation has highlighted that in many cases, short to medium-term demand is likely to remain the same or increase – reflecting ongoing demand for new and used cars, and ongoing need for vehicles to be serviced.

4.113 Consultation has highlighted a growing trend of motor trade uses being pushed out of more central parts of London as values increase and traditional locations for such uses such as railway arches and industrial estates are redeveloped. As such, demand from motor trades for space in protected industrial land such as Park Royal is likely to remain high.

4.114 In the longer term, (beyond 10 years), technological change may result in significant changes in the sector: the advent of shared, automated vehicles could result in a significant reduction in individual car ownership and hence reduction in demand for space from car dealerships and motor repair uses. However, there may be opportunities to develop new specialisms. For example, if automated vehicles are operated by companies in large fleets, then these fleets will require significant space for parking and servicing between use. A location such as Park Royal may be appropriate for this given its proximity to central London and the strategic road network.

4.115 Again, while these are seen as longer term changes, evolution of transport related sectors may be forced by need to achieve the Mayor's and EU carbon reduction targets. There could be opportunities to inspire sectors to evolve in the OPDC area, sending signals to the market that the area is a place of adaptation and innovation. This could be achieved via the piloting of new technologies and ideas (eg electric charging points balancing energy loads).

4.116 Recommendations on how the sector can be supported – including the locations where growth might be expected – are provided in chapter 6.

Future Opportunity Sectors

4.117 In addition to OPDC's current sector specialisms, a number of potential sector opportunities have been identified for the future: ICT, media and creative services, professional and business services, creative and advanced manufacturing, low carbon activities and med-tech.

4.118 Each of these sectors are explored below to understand current position, opportunities for the sector in the future and what spatial and supporting requirements are necessary to support development within the sector.

ICT, Media and Creative Services

4.119 The broadly defined ICT, media and creative services sector is one of the fastest growing in the UK, and encompasses a wide range of activities including computer consultancy, television production, media, market research, publishing and creative consultancy activities.

Table 4.8 Key Statistics for ICT, Media and Creative Services in the OPDC Development Area

	Year	**ICT, Media and Creative Services**
Number of Jobs	*2014*	**6,700**
Number of Businesses	*2015*	**290**
Employment change	*2009-14*	**-4%**
Business change	*2010-15*	**+49%**
Employment LQ vs London	*2014*	**1.2**

Source: ONS BRES (2014) & ONS UK Business Count (2015)

Current Overview

4.120 The broadly defined sector accounts for 6,700 jobs in the OPDC development area, spread across 290 businesses. The sector has a higher concentration of employment compared to London (with a location quotient of 1.2). As this suggests, the sector has a slightly higher proportion of employment in the OPDC development area compared to London, accounting 13% of employment in the area compared to 11% across London.

4.121 There are a number of important caveats to note with this analysis, however,

- Firstly, as noted previously the statistical definition of the OPDC development area does not match exactly with the official OPDC boundary, and includes the area directly to the south of Wormwood Scrubs which takes in Hammersmith Hospital and the former BBC Village Site. The presence of the latter, is likely to significantly skew the figures for creative employment in the OPDC development area (see sub-sector split below)
- Secondly, the latest BRES data is for 2014 which precedes the closure of BBC Media Village in 2015. While BBC employment remains at Broadcast Centre, it is possible that absolute employment numbers have decreased.

4.122 The ICT, media and creative services sector is not identified as a separate sub-sector within the Park Royal Atlas. However, studios (and prop houses) have a strong presence in Park Royal.

4.123 Old Oak and Park Royal's close proximity to the former BBC Media Village has a heavy influence on the creative activities present in the area, with the dominant sub-sectors being around television and motion picture production and broadcasting. The OPDC development area accounts for 13% of all England's employment in television programming and broadcasting activities (SIC code = 60200) and is certainly one of the key locations nationally for this sub-sector. In addition, 5% of

England's employment in television programme production activities is located in the OPDC development area.

4.124 As noted previously, whilst this is not explicit in the data, anecdotal evidence suggests that numerous warehouses in the area are used by the film industries as prop / stores houses. While a creative use, it is likely that these fall under the logistics and warehousing sector in statistical terms.

Table 4.9 Largest Sub-Sectors in **ICT, Media and Creative Services** by Employment in the OPDC Development Area

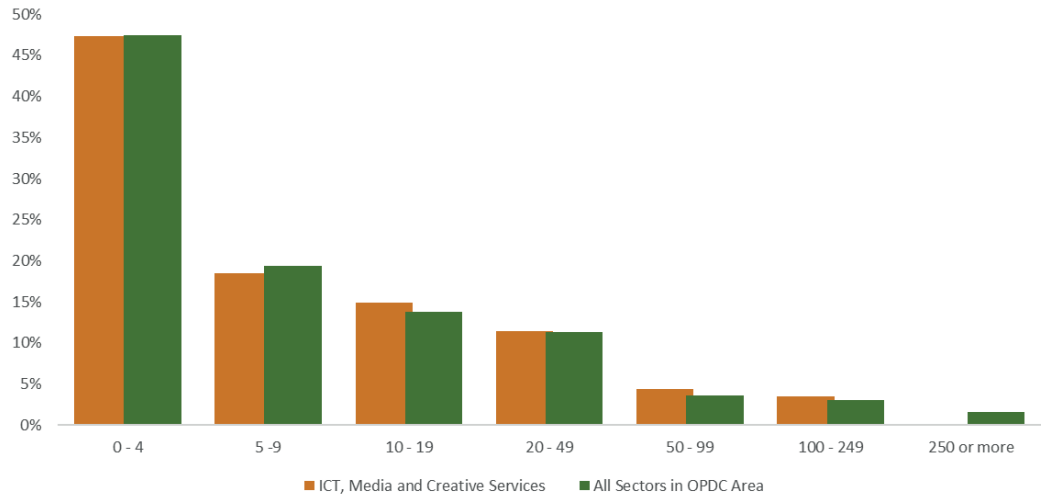
Sub-Sector	SIC Code	No of Employ.	LQ	Employ Change
Television programming and broadcasting activities	60200	3,200	13.4	68%
Television programme production activities	59113	1,400	6.3	-51%
Motion picture production activities	59111	*	2.5	4922%
Other telecommunications activities	61900	300	0.6	-50%
Film processing	74203	*	14.8	139%
Computer consultancy activities	62020	200	0.2	-53%
All Creative Activities	-	*6,700*	*1.2*	*-4%*

Source: ONS BRES, 2014

** = Disclosive Data*

4.125 The ICT, media and creative services sector has a very similar business profile to the wider OPDC economy, with a high proportion of businesses employing zero to nine employees (65% compared to 66% across the whole economy) and a number of larger businesses. There are no firms employing more than 250 employees within this sector[22], and this is reflected in the average number of employees per businesses, which is below the OPDC average (16 compared to 25).

Figure 4.7 Size of ICT, Media and Creative Services Businesses in the OPDC Area



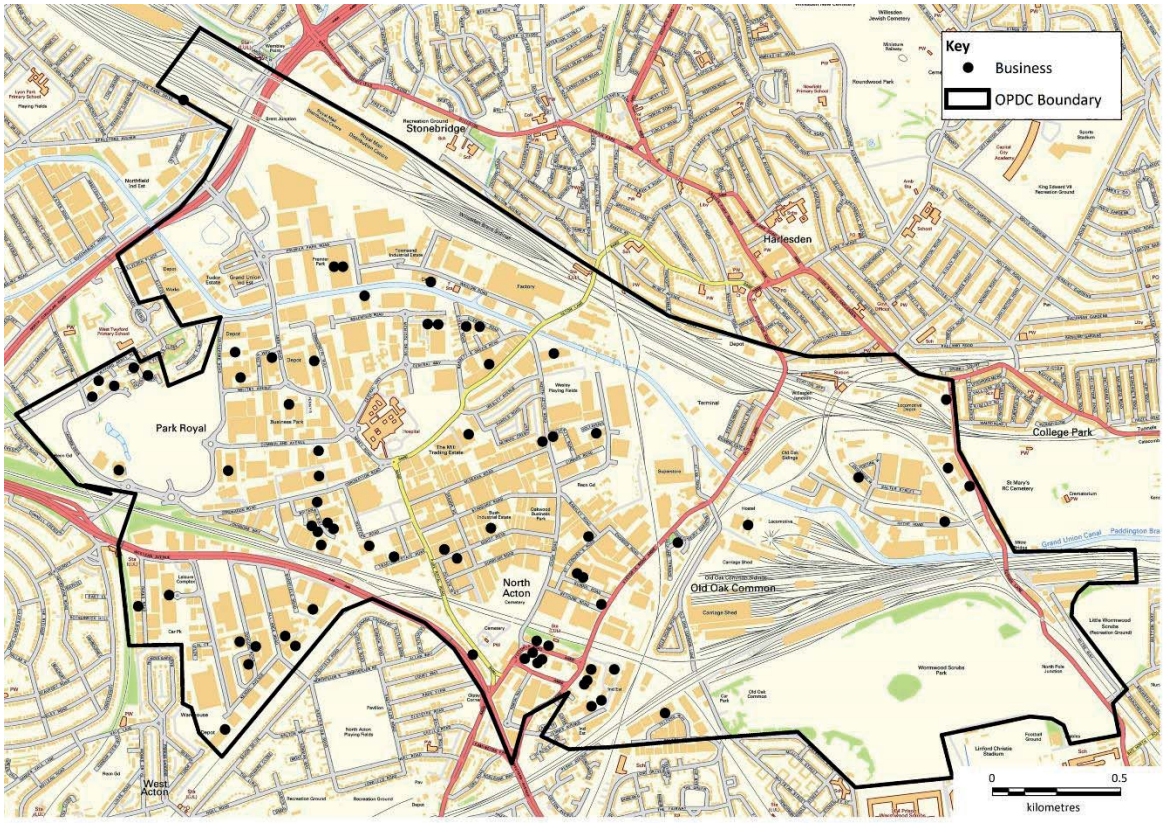
Source: IDBR, 2016

4.126 Businesses within the ICT, media and creative services sector are well dispersed throughout Park Royal industrial estate, with a significant cluster around the former BBC Media Village (to the south

[22] This reflects the fact that the BBC has been excluded from the IDBR data

east of Park Royal). The largest firms in this sector with a presence in the OPDC area include Photobox, Deluxe Media, Panalux and Colt Technology Services.

Figure 4.8 Distribution of ICT, Digital Media and Creative Services Businesses in OPDC Area



Source: ONS IDBR, 2016

4.127 The ICT, media and creative services sector in the OPDC development area has a higher proportion of full time jobs relative to comparator areas. Nationally, 85% of jobs in the sector are full time, where as in the OPDC development area, 91% of jobs are full time. This is also higher than experienced across London as a whole (88%).

4.128 The sector currently produces an estimated £426 million gross value added per annum, which is equivalent to £63,100 per worker. This is above the average GVA produced per worker in the OPDC development area (£60,500) however it is considerably behind the GVA produced per worker in the ICT, digital media and creative services sector in London (£87,300) and nationally (£79,000). This suggest that the activities in this sector at present generate lower value when compared to the activities which take place in London.

Economic Demand

4.129 The sector has experienced a small decline in employment over the past 5 years (-4%) in the area, largely linked to the closure of BBC Media Village (with a 51% reduction in employment in the television programme production activities sub-sector). However, the sector has been experiencing rapid growth across wider geographies.

4.130 The ICT, media and creative services sector is seen as one of the key areas which will drive future economic growth in the UK; economic demand for constituent parts of the sector are considered in turn below.

4.131 In the past decade, there has been a revolution in the way that ICT is used which has helped to fuel the rapid growth of the digital economy. UK plc is one of the most developed digital economies in the world – it is boosted by around £145 billion a year from digital technology, with the average British person spending around £1,500 online for goods each year[23]. Reflecting this, The ICT sector is one of central government's priority sectors for growth, driven not only by its own high value potential but also its enabling role, helping to drive innovation and productivity in other sectors. As a priority sector for the UK economy, central government is supporting this sector's growth through Innovate UK's Connected Digital Economy Catapult in London and UKTI's Technology Partnership programme, amongst other initiatives.

4.132 From a competition perspective, one of the largest challenges to growing the UK's ICT and Digital industry is the threat of international competition, especially in the US and Asia. The threat from international competition is particularly high for this sector given the intangibility and ease of distribution of many of the sector's products.

4.133 Aside from ICT, the UK has a real strength in media and broadcasting activities and plays a significant role in the capital's strength in technology and creative industries. The London 2036 Agenda for Jobs and Growth supports sustaining and further enhancing the capital's strength in the creative industry sector and outlines that growth since 2009 has been driven largely by film and broadcasting, and advertising and marketing, which are expected to continue to be key drivers of growth. Historically this has largely centred on west London and latterly, the Queen Elizabeth Olympic Park (Here East). London has the largest broadcasting hub in Europe, the leading online advertising market in Europe, one of the world's largest music industries in terms of exports and the fastest growing digital economy in the G20.[24]

4.134 The UK is home to some of the world's largest publishing companies. It is estimated that the value of the UK publishing industry is £10 billion, with 40% of this coming from exports. Similarly, the UK music industry generates around £3.5 billion globally and is the largest exporter of music after the United States.[25]

4.135 The natural strengths of the UK's creative industries are the size of the UK's e-commerce market (the largest per head in the world) and how 'digitally savvy' the population is. Research indicates that four in five Brits are now using internet on the move, thereby increasing the benefits businesses can access by tapping into digital platforms and e-commerce markets.[26] Future growth is likely to be driven by the gaming, animation and digital creative sub-sector. At the global level, the games sector is projected to grow by 6.5% per annum to 2016 and the UK entertainment and media market alone is forecast to reach £63bn by 2016.[27]

4.136 Reflecting this, there are strong growth projections for the ICT, media and creative sector in the coming years: in the period to 20141, growth of nearly 40% is projected. Strong growth is also projected in the three OPDC boroughs.

[23] UK Digital Strategy, HM Government, 2015

[24] CBI (2014), The Creative Nation: a growth strategy for the UK's creative industries

[25] Creative Industries Council (2014), *Create UK

[26] CBI (2014), The Creative Nation: a growth strategy for the UK's creative industries

Employment / Economic Opportunities

4.137 As noted above, the constituent parts of the ICT, media and creative services sector are important policy focus for the GLA and national government.

4.138 Its role in enabling other sectors of the economy to digitalise is key to its future development. The reach of digital technologies is widening, with businesses in virtually every sector beginning to use the internet and digital processes to cut the cost of purchasing, manage supplier relationships, streamline logistics and inventory, plan production, and reach new and existing customers more effectively. This will create a greater market for ICT, digital media and creative services, and it can be expected that this sector will only continue to grow in the future.

4.139 Over half of employment nationally occurs across the following occupations[28], which require strong IT and software skills are required:

- Information and Communication Technology Managers;
- Marketing and Sales Managers;
- Software Professionals;
- IT Strategy & Planning Professionals;
- IT Operations Technicians.

4.140 Flexible working is becoming more common within the sector, especially among smaller businesses. The high level of freelancers (and businesses employing between 0 and 4 employees) means this is more practical than entering fixed term contracts. Businesses within the sector have a high propensity to cluster, to allow for collaborative working and networking amongst other firms.

Spatial Requirements

4.141 As noted above, business sizes in the sector in the OPDC area vary significantly; there is an average size of 16 employees; there are a large number of micro business and business size is typically lower than average for the area.

4.142 While broad in nature, the ICT, media and creative services sector typically occupies small or large office premises, or shared workspace for the smallest firms (all B1a). Media and certain other creative activities may require light industrial or warehouse space which can be converted for their needs (B1c or B8). Within the OPDC area, there are also a number of artists studio premises (such as Apex House, Cadogan House, the Light Factory and Regents House) which are likely to accommodate creative activities.

4.143 The amount of space demanded by the ICT, digital media and creative services sector depends on the type of activity being undertaken by firms. Data centres have by far the lowest employment density, with between 180-1,400 sqm per employee. Firms involved in software development would typically require very low floorspace requirements; all is needed is a computer, good internet connections and networks. Space requirements for this type of activity would be comparable to office floorspace requirements (typically around 12 sqm per employee).

4.144 The sector is also characterised by high levels of business start-up and enterprise and as such, access to workspace available on flexible terms is of central importance. Supporting the supply of

[28] Sector Skills Assessment 2012: Information and Communication Technologies

such space across London to support enterprise and creative industries has been a policy focus of the GLA in recent years.

Spatial Evidence from the Park Royal Atlas

The Park Royal Atlas does not split out ICT, media and creative uses; the closest categories assessed are professional and other business service activities, and information and communication activities. The former accounts for around 240 workplaces, providing 160,000 sqm of space, equating to an average of 700 sqm per workplace – one of the smaller amounts seen across the Park Royal sectors. As might be expected, most of these professional and business workplaces are offices – and predominantly 'small offices'. A smaller number of business and professional activities are found in workshops and small and large warehouses. Information and communications activities account for around 110 workplaces, covering 160,000 sqm of floorspace (at an average of 1,500 sqm). These premises are relatively evenly distributed across offices, warehouses and workshops.

4.145 Specific requirements vary according to the size and nature of the firm. For larger businesses, facilities which appeal are typically units of very high quality (in a prestige location for HQ functions), excellent infrastructure (e.g. transport and superfast broadband), and an attractive environment. Increasing levels of home working in this sector is reducing the need for space and increasing the demand for premises which can be used flexibly. For start-ups or smaller businesses, the cost of space and to a certain extent convenience are likely to be the most important factors. Excellent broadband remains important, as does a strong amenity offer (eg proximity to bars, cafes etc), and an attractive or 'buzzy' neighbourhood. In many cases, shared workspaces are located in 'buildings of interest' – partly because these may be more affordable (as they cannot support larger footplates) but also as they align more closely with a creative environment.

4.146 Firms in the sector like to be in close proximity to HEIs to benefit from the latest research in advanced technologies and for skilled graduates. Low operating costs relative to London is becoming increasingly important for firms in this sector, especially during the development phase of a new company.

4.147 The ICT, media and creative services sector has a very high propensity to cluster, with prime examples of this including Tech City in London and Silicon Valley in San Francisco. Firms within this sector cluster together to take advantage of strong accessibility to labour, customers and markets, in addition to networking opportunities by being in close proximity to like-minded people. Government support is often required to help establish these clusters, although some can develop on their own, such as Tech City, which only received official support in 2010. Clusters are typically located in premier and major business parks or in city centres close to public transport.

Other Supporting Requirements

4.148 The high GVA produced per worker within the ICT, digital media and creative service sectors means it can afford higher rents than other firms, and businesses are often willing to pay more to secure premises close to major transport hubs and town centres.

4.149 This desire for firms to be close to major transport hubs and town centres often results in high rents, something which newly established firms may not be able to afford. To compensate this, affordable (subsidised) and flexible workspace may need to be provided in order to attract firms and help support them as they grow.

4.150 A large proportion of jobs within the ICT, Digital Media and Creative Services sector are in management and professional occupations (63% nationally)[29]. Qualification levels in the sector have been rising since 2002 and the Information and communication technologies sector is one of the most highly qualified sectors in the UK economy[29].

4.151 Create UK (2014) identified a gap in the provision of private funding and debt finance for business expansion and growth that goes beyond initial start-up or individual projects. This financing gap tends to exist particularly in the creative and media sectors for two main reasons. The first is due to a fragmented funding landscape, making it difficult for creative and digital industry firms to understand which financial products they are eligible to access. The second is that traditional financial products are not compatible with these firms' business models, whose main assets are IP-based.

4.152 Infrastructure, particularly superfast broadband, is another factor that can act as a barrier to growth in the ICT, digital media and creative services sector. At present, 87% of homes and businesses have access to speeds of 30Mbit/s or more[30], although not all are connected due to a lack of Internet Service Provider incentive and material demand from users. This figure is expected to rise as further public and private sector investments are made, in parallel with efficiencies created through technological and deployment advancements. However, in the context of austerity and spending cuts, the exponential increase in cost of extending superfast connectivity to rural areas, means the target of ubiquitous access remains challenging. Although the UK is on track to achieve the EU 2020 target of 30Mbit/s total coverage and 98% 4G coverage by 2017, Create UK notes that a more strategic long-term vision for digital infrastructure is needed to stay competitive.[31] Existing businesses in Park Royal have highlighted issues with access to broadband, and OPDC is already working with them to try and identify possible solutions. A SMART Strategy is also being developed to explore how contemporary and emerging technologies can shape the Local Plan and the development of Old Oak and Park Royal in relation to transport, public realm, utilities and climate change mitigation/adaptation. The implementation of SMART concepts, and the range of challenges which this could overcome, could help to increase sector activity in the OPDC area and drive innovation.

Learning from Elsewhere

4.153 There are a number of existing clusters of ICD, Digital and Creative services which provide further evidence on the needs and demands of the sector. These include:

- Here East – HereEast is a 1.2 million sqft area of commercial space that is housed in the former Press and Broadcast Centres at the Queen Elizabeth Olympic Park. It has been designated as a destination for the innovative business and maker community and has been transformed into flexible working space with superfast broadband. HereEast has already attracted numerous small and large businesses, including BT Sport's broadcasting centre. It hopes to encourage collaboration between businesses of all sizes. HereEast is also acting as a training ground for new talent, with Hackney Community College providing the UK's first digital apprentices and Loughborough University creating a new research centre for postgraduates. HereEast provides a good example of the development of a new hub aimed at stimulating development of a sector not previously located in an area. It highlights the

[29] Sector Skills Assessment 2012: Information and Communication Technologies

[30] Sourced from ThinkBroadband, Local Broadband Information 2016. This provides an accurate and up-to-date view of broadband coverage, incorporating private sector deployment and public sector investment in extended superfast coverage.

importance of flexible start-up and grow on space to support creative enterprise and also the importance of strong amenity for sectors of this nature.

- The Golden Mile – the Golden Mile in west London is one of west London's most important employment hubs. Located within the 'Western Corridor" the area benefits from proximity to both central London and Heathrow, and has historically been successful in attracting large and high profile employers. Today the Golden Mile is home to around 450 businesses, supporting 24,000 jobs which account for 17% of all employment in Hounslow. Major employers that are located within the Golden Mile include; Sky and JCDecaux. Hounslow currently has the highest concentration of Media and Broadcasting employment across all London Boroughs and the Golden Mile accommodates a significant amount of this activity – partly reflecting the presence of Sky, but also reflecting the clustering of smaller media and creative businesses in the area. While much of these strengths are historic, the case study provides a strong example of where businesses are working with public sector partners to articulate and market the strength of the cluster, and to lobby for transport and wider infrastructure enhancements. The cluster also demonstrates the highly competitive nature of the sector in west London, let alone the city as a whole.
- Liverpool Baltic Triangle – the Baltic Triangle in Liverpool was once a workshop and warehouse district associated with the Docks. It is now experiencing a renaissance and is quickly becoming home to a diverse range of creative and digital industries. The City Council has made a commitment to improving roads and pavements and investors are bringing new life (and new use) to existing buildings. Over the past 5 years its character has started to change significantly and has benefited from residential investment and investment into creative businesses including the creation of the Baltic Catalyst, providing 45,000 sqft of space for developing creative businesses. The case study provides an example of where existing 'characterful' industrial stock has been turned to creative uses alongside the provision of new infrastructure and enhanced amenity

4.154 Further case study information is provided in Appendix A.

Opportunities for Old Oak Royal and Park Royal

4.155 The ICT, Media and Creative sector is currently comparatively small in Park Royal area; while employment is more concentrated than is average across London, this mainly reflects the BBC and related activities just to the south of Park Royal.

4.156 Despite this, there is strong potential for growth in the sector in the coming years. The sector has seen strong growth across London in recent years and is a priority for growth at both the London and UK levels. Growth of nearly 40% is projected across London in the period to 2041.

4.157 There appears to be good potential for Old Oak and Park Royal to tap into this growth – this is particularly the case in the medium to longer term, aligned with the delivery of office and other mixed use floorspace within Old Oak sites. In the shorter term, growth is likely to be more limited, although it is possible that older and less expensive units in Park Royal may prove attractive to creative businesses. The delivery of shared workspace could also help to stimulate growth in the sector locally and in earlier phases.

4.158 In the longer term, the delivery of office space (and related infrastructure and amenity improvements) at Old Oak will help to attract new ICT and creative service activities to the area. However, given the strength of competition in the sector across London, significant work will be required to attract investment and anchor tenants to the area. Given the long term nature of the development, it will also be important to monitor the changes in working patterns and trends (eg home working and decentralisation), as these have the potential to impact on the nature of

demand. There is also potential to build on west London's strong media sector to attract new media activities to the area – establishing linkages with existing sector bodies and local representative organisations (eg TV Triangle) will help to define the nature of the opportunity.

4.159 Recommendations on how the sector can be supported – including the locations where growth might be expected – are provided in chapter 6.

Business and Professional services

4.160 Business and professional services are activities in the tertiary sectors. The sector encompasses a wide range of activities from business support activities (i.e. temporary employment agencies, cleaning activities etc) to professional and financial services (i.e. accountancy, finance and insurance, consultancy etc.).

Table 4.10 Key Statistics for Business and Professional Services in the OPDC Development Area

	Year	**Business and Professional Services**
Number of Jobs	*2014*	**10,500**
Number of Businesses	*2015*	**600**
Employment change	*2009-14*	**+12%**
Business change	*2010-15*	**+41%**
Employment LQ vs London	*2014*	**0.6**

Note: To avoid duplication, the above numbers exclude ICT and creative service activities, which are considered separately.

Source: ONS BRES (2014) & ONS UK Business Count (2015)

Current Overview

4.161 This sector accounts for a fifth of jobs within the OPDC development area – 10,500 jobs across around 600 businesses. The sector has a lower concentration of employment relative to London (with a location quotient of 0.6). The sector accounts for around a quarter of all businesses in the OPDC development area (26%) compared to 38% across London. Similarly, a fifth of employment in the OPDC development area is in the sector compared to 32% across London.

Business and Professional Services: Observational Analysis

While the sector definition is not directly comparable to that used above, the Park Royal Atlas identifies around 240 workplaces being used for professional services and other business activities, covering around 160,000 sqm.

4.162 Sub sectors within the OPDC development area which have a strong presence in the Business and professional services sector include temporary employment agencies and cleaners. Caution should be exercised of these figures relating to business support services, as a large proportion of jobs in this sector can be attributed to recruitment agencies and facilities support services (e.g. cleaners), and it is likely that these jobs are located off-site (including outside of the boroughs). This is likely to be the case in the OPDC development area, with employment located across London given its close proximity to a number of other key employment areas.

Table 4.11 Largest Sub-Sectors in **Business and Professional Services** by Employment in the OPDC Development Area

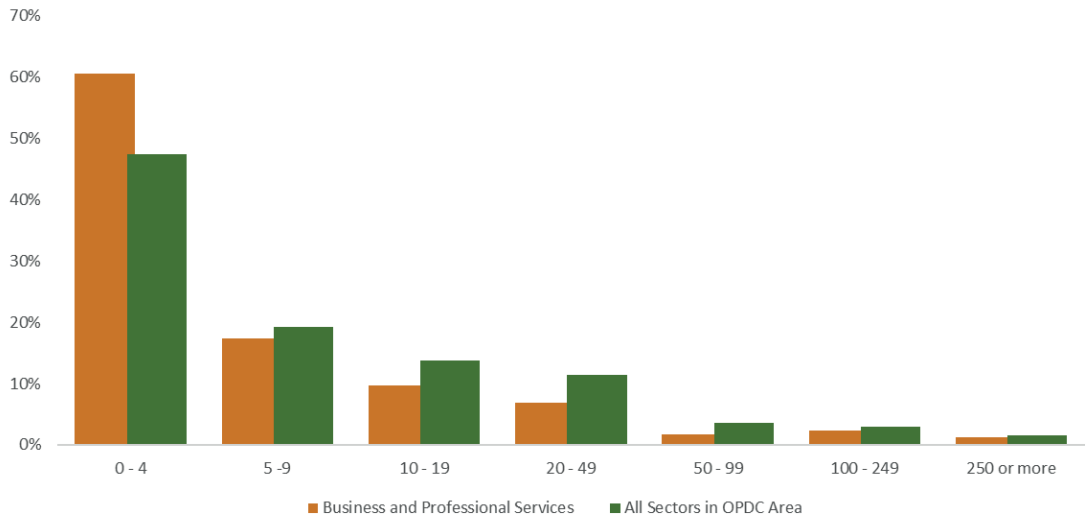
Sub-Sector	SIC Code	No of Employ.	LQ	Employ Change
Temporary employment agency activities	78200	2,700	2.0	+162%
General cleaning of buildings	81210	1,700	1.7	+1706%
Other research and experimental development	72190	1,500	8.0	+7%
Activities of head offices	70100	700	0.9	+86%

Other business support activities	82990	500	0.7	+230%
Private security activities	80100	400	0.7	+432%
All Business & Professional Services Activities	-	*10,500*	*0.6*	*+12%*

Source: ONS BRES, 2014

4.163 Businesses in the business and professional services sector tend to be smaller than those in the wider economy. The average business in this sector employs 16 people within the OPDC area compared to 25 across other sectors. There is a high prevalence of micro businesses, with 61% of businesses employing between zero and four people and a further 17% employing between five and nine people.

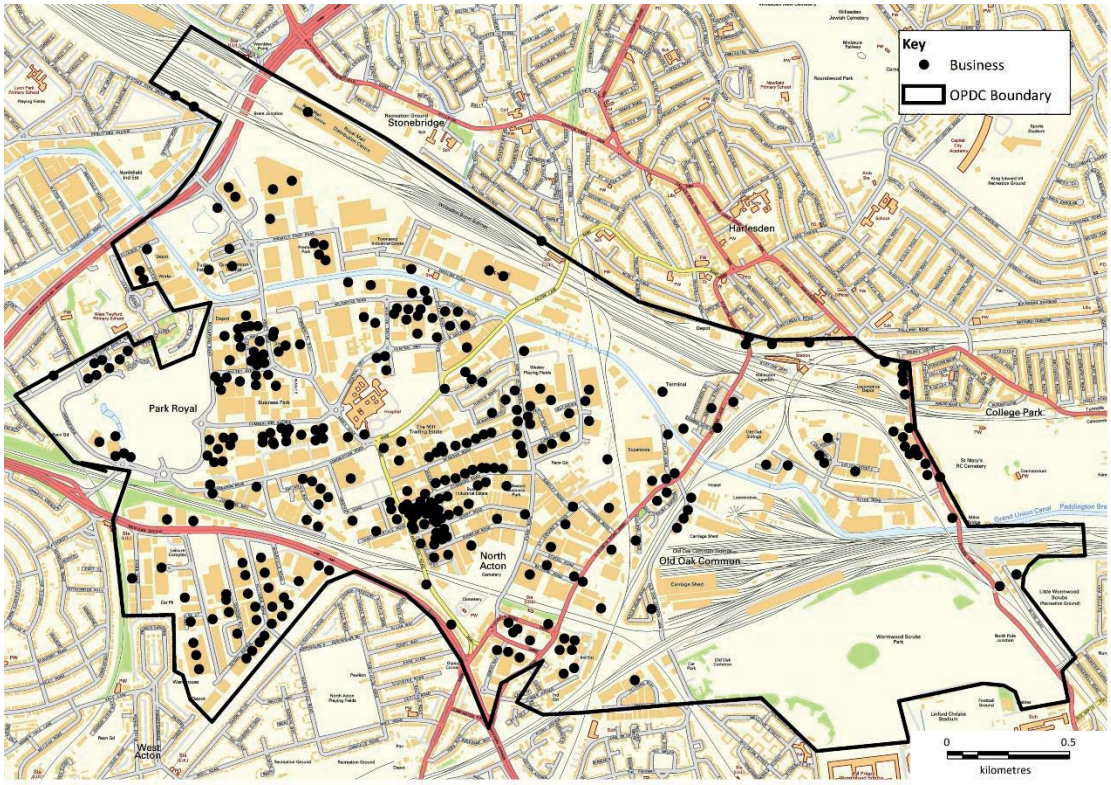
Figure 4.9 Size of Business and Professional Service Businesses in the OPDC Area



Source: IDBR, 2016

4.164 Business activity in the business and professional services sector is fairly evenly spread across the OPDC area, with some concentrations of activity around Eldon Way, the Park Royal Business Centre, Heron Trading Estate and Oliver Business Park.

Figure 4.10 Distribution of Business and Professional Services Businesses in OPDC Area



Source: ONS IDBR, 2016

4.165 A high proportion of jobs in the OPDC development area are full-time, accounting for 91% of all jobs. This is comparable to London (88%) and national (92%) proportions.

4.166 The sector is highly productive relative to other sectors of the economy, with an average GVA per worker of £71,300 compared to £60,500 across the wider economy. However, the sector's productivity in the OPDC area lags behind the sector across the rest of London, which has a GVA per worker of £110,800. This gap is in part due to the large presence of the business support services sector in the OPDC area, which has a much lower productivity (£47,100) than the other sub-sectors (financial and professional services = £94,000; other services = £126,700).

Economic Demand

4.167 The sector has experienced a strong increase in employment over the last five years (+83%) in the OPDC area, which is higher than experienced across the West London Alliance (+18%) and in London (+15%) and nationally (+12%). This has largely been due to strong growth within the business support services sector (+203%). The business base has also experienced strong growth over the last five years (+41%), although this is a similar level to what has been experienced across London (+38%).

4.168 The UK is renowned for its business and professional services and the Smart Specialisation in England (2015) highlights the importance of the sector for the country's economy. It was identified as one of the most resilient sectors, which continued to grow despite the economic downturn, and is characterised by easy access for new firms entering the market, with additional 600,000 jobs expected in the UK in the next decade.

4.169 The UK business and professional services sector is one of the UK's most competitive sectors, generating 11% of UK GVA and 12% of employment.[32] Not only does it have a trade surplus of £19 billion, but its value added to the economy has grown over 50% in real terms since 2000.[33] The sector is comprised of large, multinationals as well as small and medium sized firms which benefit from low barriers to entry.

4.170 The UK business and professional services sector was equal to £153 billion in 2011 and is forecast to grow at 4% per annum until 2021, equal to a cumulative increase of nearly 50% in real terms.[34] The greatest challenge and potential opportunity facing the UK's business and professional services sector is related to growth in overseas markets, particularly emerging economies. This sector's exports are traditionally focused in the EU and the United States, but it will be important for UK businesses to compete with business and professional service sectors in new global hubs that have emerged in Dubai, Shanghai, Hong Kong and Singapore. At the same time, emerging economies such as the BRICs represent huge growing markets where UK firms should look to grow their market share.

4.171 Additionally, increased (financial) regulation is putting pressure on the growth potential of the sector. This is particularly the case for smaller businesses who may lack the expertise or resources to conform.[35]

4.172 At the London level, the city is one of the world's financial capitals and the lead provider of many professional and support services associated with the financial industry. This includes activities such as legal services, management consultancy and accountancy, for all of which London is a global leader. Additionally, London's financial and professional services market has several key areas of specialism, including Islamic finance, for which the UK has become the leading western centre for Shariah-compliant financial services.

4.173 The London LEP's 2036 Agenda for Jobs and Growth Strategy sets out the key platforms for helping drive jobs and growth in London. The Financial and Business Service sector is identified as one of the key economic priorities for sustaining and developing a platform for growth in the city. The plan sets out the key future role of the sector in contributing to London's growth and the importance of sustaining this sector strength.

4.174 Reflecting this, there are strong growth projections for the sector in the coming years: in the period to 2014, growth of nearly 32% is projected. Strong growth is also projected in the three OPDC boroughs.

Employment / Economic Opportunities

4.175 Jobs within the business and professional services sector include a wide range of professions, from accountants, lawyer and financial-based jobs to administrative and secretarial jobs.

4.176 As noted above, the sector is currently one of the largest in London and accounts for around a third of employment. There are aspirations to grow this further, with the Mayor's Economic Development Strategy and London LEP's 2036 Vision Document highlighting the need to grow the sector in the future and build on London's position as one of the world's top global cities.

4.177 The dominance of the sector in London reflects the large pool of highly skilled labour available in the area. This trend is likely to continue in the future, with firms locating close together to take

[32] HM Government (2013), Growth is Our Business: A Strategy for Professional and Business Services

[33] HM Government (2013), Growth is Our Business: A Strategy for Professional and Business Services

[34] HM Government (2012), Professional & Business Services

[35] UKCES (2012), *Financial and Other Professional Services Sector Assessment*

advantage of good access to a highly skilled workforce and the benefits of agglomeration associated with a high concentration of businesses within the sector. Networking opportunities between businesses further enhances the potential of small businesses, and this is something which London currently excels at.

Spatial Requirements

4.178 As noted above, business sizes in the sector in the OPDC area vary significantly; there is an average size of 16 employees; there are a large number of micro business and business size is typically lower than average for the area.

4.179 Firms in the business and professional services sector tend to require B1a space (General Office), and many will require high quality facilities (in a prestige location for HQ functions) in order to attract a highly qualified workforce. The need for attractive space carries out into the surrounding area, with good quality facilities for staff required as well as good transport connections. Employment densities for B1a space range from 8-12 sqm per FTE, with the highest densities being provided in more modern facilities. Increasingly hot desking and flexible working is being encouraged within such facilities.

4.180 Business support / back office function are less likely to require prestigious locations and in many cases are located in more peripheral locations and in lower grade office space.

4.181 For smaller firms, shared workspace or co-working space is becoming increasingly important, offering the ability for flexible terms, a variety of locations to work out of, and enabling collaboration between businesses. Most co-working spaces offer monthly membership fees in return for a hot desking environment with fast Wi-Fi connections, meeting rooms and kitchens as well as hosting business and social events.

4.182 Sites where business and professional services are typically located, include premier/major business parks and in town and city centres.

Spatial Evidence from the Park Royal Atlas

The Park Royal Atlas suggests that professional and other business service activities currently account for around 240 workplaces, providing 160,000 sqm of space. This equates to an average of 700 sqm per workplace – one of the smaller amounts seen across the Park Royal sectors. As might be expected, most of these workplaces are offices – and predominantly 'small offices'. A smaller number of business and professional activities are found in workshops and small and large warehouses.

Other Supporting Requirements

4.183 The high GVA per worker in this sector (especially in financial, business services and other services) and the low amount of floorspace required per employee means that firms within the sector are often willing to pay higher rents in order to secure prime locations close to strategic transport hubs and city centres. For smaller businesses, flexible workspace is highly desired, and the increasing prevalence of shared workspaces in London reflects the demand for this type of space.

4.184 There is expected to be a net increase of over 600,000 jobs across the UK in the business and professional services by 2020, which will create considerable demand for people with degree-level

qualifications or higher, with over half of those currently in the sector having a degree level or above qualification[36].

4.185 In terms of skills, this sector highly sensitive to new hires being 'work ready.' A McKinsey survey of employers in this sector found they were generally less satisfied with the preparedness of new recruits than for other sectors as a whole.[37]

4.186 A further challenge for the sector is that it has historically drawn from relatively narrow social strata, resulting in a workforce that could be more representative of the clients and the society it serves. It also means that the sector is not always tapping into the widest available talent pool.

Learning from Elsewhere

4.187 Canary Wharf provides a pertinent example of a former brownfield location which over a long term period has evolved into a centre for business and professional services.

4.188 The first buildings were completed in 1991, after the establishment of the London Docklands Development Corporation and the granting of Urban Enterprise Zone status to the Isle of Dogs. Development was enabled by major transport investments including DLR and more recently the Jubilee Line Extension (JLE). Canary Wharf now employs around 105,000 people across office and retail floorspace totalling around 16 million sqft. It is home to the world or European headquarters of numerous major banks, professional services firms and media organisations. Lessons for OPDC include the need for long term vision and political and strategic support, the importance of attracting 'anchor tenants' to help transform / establish reputations, and the catalytic role that initial and subsequent transport improvements key to opening up land and changing perceptions.

4.189 Further information is provided in the Appendix A.

Opportunities for Old Oak Royal and Park Royal

4.190 While the sector is currently a comparatively large employer in the Park Royal area, it has a low level of specialisation relative to the London average. Jobs in the sector are currently typically focused around business support activities such as cleaning and security activities rather than professional and financial services. Also, it is likely that many of these business support jobs are not actually located within Park Royal (i.e. they are registered at a business address).

4.191 The business and professional services, is London's largest employment sector and is projected for strong growth in the period to 2014. As with ICT, media and creative services, there is strong potential for Old Oak and Park Royal to tap into this growth in the medium to long term, aligned with the delivery of significant amount of office floorspace around Old Oak Common station, and given the major transport, accessibility, environment and amenity improvements planned.

4.192 It is likely that the sector will evolve significantly in the area over the plan period.

4.193 The delivery of office space (and related infrastructure and amenity improvements) at Old Oak will help to attract new professional and financial service activities to the area. However, given the strength of competition in the sector across London, significant work will be required to attract investment and anchor tenants to the area. Given the long term nature of the development, it will also be important to monitor the changes in working patterns and trends (eg home working and decentralisation), as these have the potential to impact on the nature of demand.

[36] HM Government (2013), Growth is Our Business: A Strategy for Professional and Business Services

[37] HM Government (2013), Growth is Our Business: A Strategy for Professional and Business Services

4.194 Business support services are likely to continue to remain an important source of employment. These have the potential to play a role in supporting the delivery and operation of new development in the area – supporting local supply chain linkages should there be an important priority.

4.195 Recommendations on how the sector can be supported – including the locations where growth might be expected – are provided in chapter 6.

Creative Manufacturing

4.196 The creative manufacturing sector is part of the wider maker economy, which can be defined as activities with any output that has been created through a set of inputs which has had some added creative value to it. The maker economy has been rising rapidly within the UK and specifically in London over the last five years.

4.197 The maker economy has shifted the way in which traditional manufacturing takes place[38], with less focus on large-scale manufacturing and more on its accessibility to all people: from industry experts to self-taught entrepreneurs. Increasingly, the output of this making process does not have to be a physical product, rather outputs can be as diverse as from a car to contemporary art.

4.198 The maker economy has a common set of characteristics, including collaboration (both inside their own industry and with other industries and disciplines), a focus on design-led making and a willingness to rapidly prototype and not be afraid to fail.

4.199 The sector may overlaps in part with wider ICT, creative and business service activities.

Table 4.12 Key Statistics for Creative Manufacturing in the OPDC Development Area

	Year	**Creative Manufacturing**
Number of Jobs	*2014*	**250**
Number of Businesses	*2015*	**25**
Employment change	*2009-14*	**+30%**
Business change	*2010-15*	**+25%**
Employment LQ vs London	*2014*	**1.1**

Source: ONS BRES (2014) & ONS UK Business Count (2015)

Current Overview

4.200 The creative manufacturing sector is currently relatively small in the OPDC development area, employing around 250 people in 25 businesses. However, official statistics are likely to underestimate the size of this sector given that large numbers of firms within this sector tend to fall under the VAT registration threshold (a turnover of £83,000).

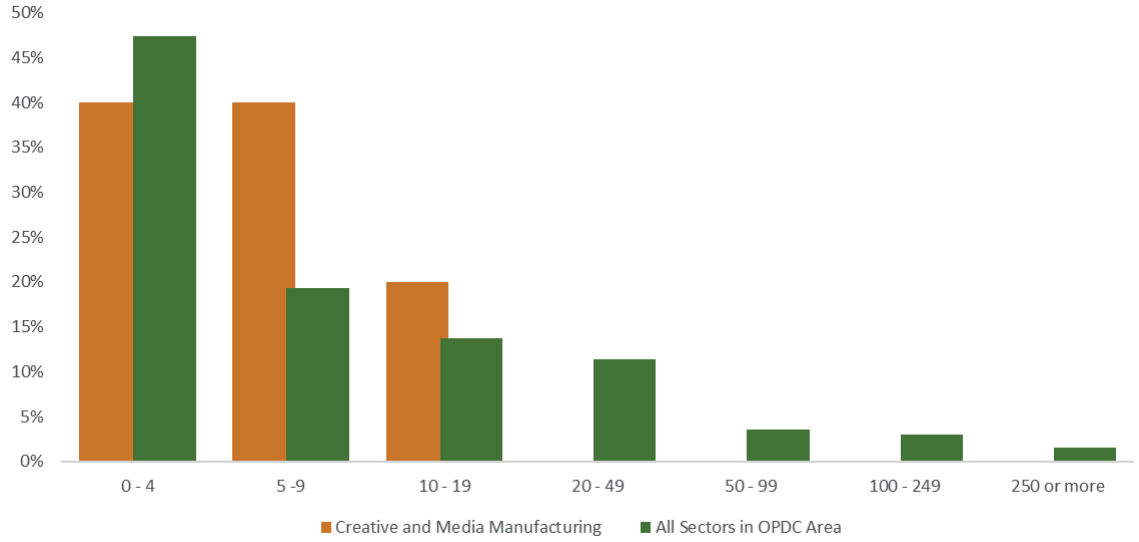
Creative Manufacturing: Observational Analysis

Reflecting the relatively small and niche nature of the sector, creative manufacturing is not identified as a separate sub-sector within the Park Royal Atlas. The Atlas identifies around 200 manufacturing workspace which are non-food manufacturing, covering 210,000 sqm of floorspace; the proportion of these which are creative manufacturers is unknown, but based on ONS data, likely to be relatively low.

4.201 The majority of creative and media manufacturing businesses in the OPDC area are micro businesses, with the average businesses employing six people. The vast majority employ fewer than 10.

[38] Deloitte, 2014, Here East: Olympic Legacy

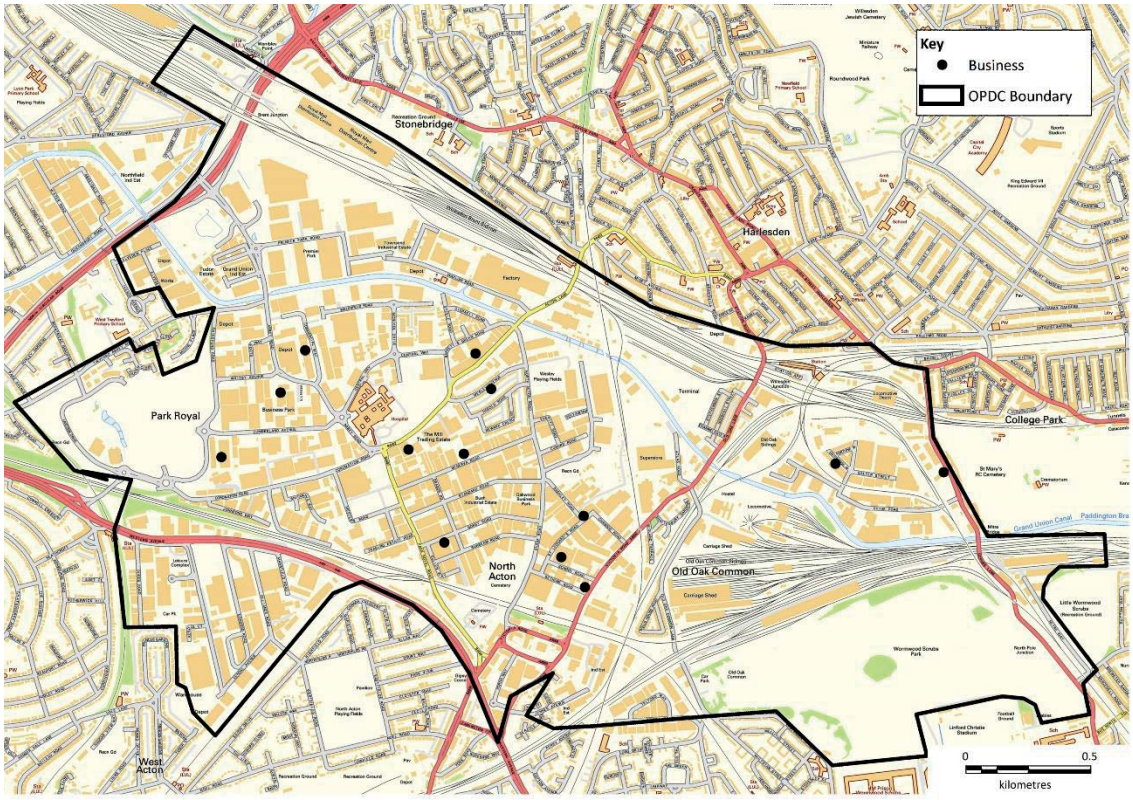
Figure 4.11 Size of Creative Manufacturing Businesses in the OPDC Area



Source: IDBR, 2016

4.202 Currently firms are well dispersed across the Park Royal Industrial Estate – as would be expected for such a small sector, there are no obvious signs of clustering currently.

Figure 4.12 Distribution of Creative and Media Manufacturing Businesses in OPDC Area



Source: ONS IDBR, 2016

4.203 A large proportion of jobs in creative manufacturing are full time, with these accounting for 89% of all employment in the OPDC development area. This is higher than the proportions in London (83%) and nationally (84%).

4.204 The creative manufacturing sector currently produces £11.0 million GVA per annum. This works out as £43,800 GVA per worker, which is below the area's average GVA per worker (£60,500).

Economic Demand

4.205 Employment has grown by 30% over the last five years in the OPDC development area and contradicts declining employment across London (-1%) and nationally (-4%) – all be it from a small base. The business base has also experienced strong growth over the last five years (+25%) which again contradicts declines experienced across London (-9%) and nationally (-11%).

4.206 The creative manufacturing sector has large potential to grow in the future, with the sector being driven by significant technological innovation[39]. This has helped to democratise the means of production and enable new connections to be made between resources and markets. The maker movement is set to emerge as a source of livelihood, as individuals find ways to build small businesses around their creative activity and large companies increasingly automate their operations.

4.207 Factors that are expected to drive the sector in the future include:

- **Further technological advances** – developments in 3D printing and technology enable more people to take part in creative activities, attracting more people into the sector. The rise of online retailing (especially specialist sites such as Etsy) has provided firms with a cheap platform to sell manufactured goods to a global audience.
- **Increasing automation by larger manufacturing firms** – the drive for higher profit margins and developments in robotics and technology, will see production becoming ever more automated. The creative talent no longer required by these firms may seek out other opportunities to develop their creative talent, starting new businesses.
- **Flexible and collaborative working** – the increasing desire for people to have flexible lifestyles and the virtual communities, which are driven by a desire for people to learn faster by working together, has helped to build a new enterprise systems build through networks.

4.208 Economic projections are not available for creative manufacturing, but consultation has highlighted it as a sector where there is potential for growth in future years across outer London, (contrary to wider projects for employment decline across more general manufacturing activities).

Employment / Economic Opportunities

4.209 The high proportion of micro businesses in this sector reflects the freelance nature of it. Many people employed in creative and media manufacturing tend to be self-employed[40], and dependent on an irregular source of income (which is earned when selling products).

4.210 While not an identified priority sector, creative manufacturing and making has received a degree of policy emphasis in recent years via the GLA's support for business start-ups and SMEs and for flexible and affordable workspace. The GLA, Borough and partners have invested in a number of

[39] Deloitte Centre for the Edge and Maker Media, 2013, Impact of the Maker Movement

[40] Creative & Cultural Skills, 2011, Sector Skills Assessment for the Creative Industries of the UK

maker spaces across the city in recent years, such as BuildingBloqs in Enfield and the Central Research Laboratory in Hayes.

4.211 Such investment and policy emphasis reflects the important role that creative enterprise (including making) has to play in driving innovation and research, in developing the future technologies and services and also in the role they can play in place making.

Spatial Requirements

4.212 As noted above, business sizes in the sector in the OPDC area vary significantly; however, there is an average size of 6 employees, with business size typically lower than average.

4.213 Businesses in the creative manufacturing sector require a wide variety of different spaces. For smaller businesses, makerspaces with a high degree of flexibility, resources and support are the most preferable, enabling close collaboration with other young businesses. The typical employment density for makerspaces is 15 to 40 sqm per employee[41], and this varies depending on the type of makerspace being established and the membership model used (with businesses using the space on an ad-hoc basis, or being more permanently located within the space).

4.214 Makerspaces require a wide range of facilities to enable makers to manufacture products. They can incorporate a wider range of maker equipment depending on the makers they wish to attract, and this includes 3D printers, laser cutters, cnc machines, hand tools, soldering irons and sewing machines.

4.215 For more established businesses in the sector, B2 industrial and manufacturing space is the most desirable, which typically has an employment density of 36 sqm per employee[41].

4.216 Within the OPDC area, there are also a number of artists studio premises (such as Apex House, Cadogan House, the Light Factory and Regents House) which may to accommodate creative making activities.

Spatial Evidence from the Park Royal Atlas

Making / creative manufacturing is not identified as a separate sub-sector within the Park Royal Atlas. However, the Atlas identifies around 200 manufacturing workspace which are non-food manufacturing, covering 210,000 sqm of floorspace. While the proportion of these which are creative manufacturers is unknown, it is worth noting that these are largely distributed across workshops, small warehouses and large warehouse. The average size of non-food manufacturing workplaces is 1,100m2. Based on evidence from elsewhere, creative manufacturing is likely to occupy lower amounts of space than is average for other manufacturing businesses. This is likely to be the case in the OPDC area given the small size of businesses.

4.217 Businesses within creative sectors have a high propensity to cluster, with a number of leading examples in London around Camden (and the Camden Collective) and Here East. A central shared workspace facility or research asset often acts as an anchor for such clusters, as exemplified by the Blackhorse Workshop in the Blackhorse Lane Creative Enterprise Zone. Creative firms often cluster around trendy neighbourhoods with good amenity – including cafes, bars, meeting venues and other cultural assets.

4.218 By bringing together clusters of firms in the maker economy, it is able to generate economies of agglomeration, whereby firms benefit from economies of scale and networking effects by working in close proximity to each other. This often reduces costs for businesses significantly as they are

[41] HCA Employment Density Guide, 2015

able to choose from a large number of local suppliers, who have greater specialisations, and this leads to firms creating products at a cheaper price, therefore increasing their profit margins.

Other Supporting Requirements

4.219 The creative manufacturing sector has a relatively low GVA per worker, and this presents challenges for small businesses looking to develop. Providing free (or subsidised) workspace for newly established businesses (or those looking to expand) can help to accelerate the growth of new businesses[42]. Workspace available on highly flexible terms or at below market rates is hence often seen as key in helping to support development of creative clusters. The price sensitivity of creative firms has been illustrated by the example of Old Street, where many of the original occupiers are now moving further outwards due to rising rents.

4.220 Makers require easy access to consumers in order to be able to sell their outputs. Local Retailers are 'the life blood of the maker movement"[43], as smaller firms often cannot break into larger markets without first proving success at a local level. The increasing emergence of online retail platforms (such as Etsy) has also helped provide a new retail platform for creative businesses. Other ideas which have worked in the past include creating 'rotating Maker micro-malls' and the creation of independent prototype shops, allowing firms to trial new products before launching them to a wider market.

4.221 Smaller firms often require access to finance to enable the growth of their business, and this can involve grants and subsidies from the government. Increasingly the crowdfunding movement has helped to finance many smaller maker firms to allow them to invest in further research and development, or to scale up production to sell to the mass market. The crowdfunding movement has increased from $1 billion in 2011 to $14 billion in 2014.

4.222 The Sector Skills Assessment for the Creative Industries of the UK[44] found that most areas of the creative industries, including creative and media manufacturing, have very different skill requirements to the general labour market, with a heavy reliance on freelancers. The sector has long been characterised by an oversupply of potential new entrants, leading to a high level of voluntary or unpaid working, with nearly half the workforce in creative industries reporting having worked unpaid in order to get into the industry[45]. The assessment finds that there is often a skills mismatch between the needs of the job and the workforce entering the sector. Skills which are currently in short supply from new entrants include sales and marketing skills, multi-skilling, technological awareness, pattern cutting and grading, textile technologists, supervisors, and generally across associate and professional occupations in areas such as crafts, performing arts, visual arts and design[46].

4.223 To ensure the continuing success of the maker movement, there needs to be a hybrid educational structure, which creates more avenues for access to the maker movement, and therefore more opportunities for people of all ages to engage. This starts from imbedding making at a young age

[42] As mentioned in "How Makerspaces Help Local Economies", article by John Tierney (17th April 2015), based on talks held at the Conference on World Affairs & "Impact of the Maker Movement" (2015) by Maker Media & Deloitte.

[43] in "How Makerspaces Help Local Economies", article by John Tierney (17th April 2015), based on talks held at the Conference on World Affairs

[44] Creative & Cultural Skills, 2011, Sector Skills Assessment for the Creative Industries of the UK

[45] Skillset, 2008, Creative Industries Workforce Survey. Excludes Film Production, Photo Imaging, Publishing and Advertising.

[46] Skillset (2010) Creative Media Employer Survey. Excludes Advertising; Fashion and Textiles Survey of Employers 2008; Creative and Cultural Skills (2009) Workforce Survey

(through extra-curricular activities), to apprenticeships for young adults and training course for adults thinking of starting new businesses.

Learning from Elsewhere

4.224 A number of case studies have been identified which provide interesting examples of creative manufacturing activity taking place elsewhere in London. These include:

- BuildingBloqs, Enfield – BuildingBloqs was established in 2012 as a response to London's declining availability of affordable and appropriate workshop space. It provides the tools needed for London's freelance makers, small businesses and designers to establish and grow, with more flexibility and less cost and risk. The project was recently allocated £2.7m from London Regeneration Fund to transform a warehouse into the largest workshop space in Europe catering for a community of 1,000 freelance makers, small businesses and designers with a wider range of trades and disciplines. The example demonstrates the demand for new workspace models in London, including the provision of low threshold workspace to support enterprise and to encourage collectivism and network development. It also demonstrates the role that creative workspace can play in place making –Building BloQs being promoted as a central anchor of Enfield's wider place making aspirations and plan at Meridian Water
- Blackhorse Lane, Waltham Forest - Blackhorse Lane provides a further example of a creative manufacturing cluster being established in north London. Blackhorse Lane is an existing industrial area and an area of focus for both the council and the GLA, linked to wider housing zone proposals. As part of this, the council have placed creative manufacturing at the heart of their regeneration proposals and place making aspirations. This centres around the provision of flexible workspace to support creative enterprise at Blackhorse Workshop and Gnome House. Lessons of relevance for OPDC include: the importance of generating identity and perception to gather momentum behind creative activities, the need to respond to changing space demands (eg the provision of bespoke and flexible space) and the importance of strong amenity to support / attract enterprise.

4.225 Information on both these case studies is provided in the Appendix A.

Opportunities for Old Oak Royal and Park Royal

4.226 Creative manufacturing is currently a small sector in the OPDC area, but it has seen a good level of growth in recent years.

4.227 While economic projections are not available for creative manufacturing, consultation has highlighted it as a sector where there is potential for growth in future years across outer London, reflecting the broader evolution of the creative economy and higher rents in the existing creative hubs (e.g. Shoreditch and Hackney) forcing firms in the sector to seek lower rents in outer London. This is contrary to wider projections for employment decline across more general manufacturing activities.

4.228 Park Royal appears to be an attractive location for such activities, given its existing manufacturing strengths, its strong accessibility and suitability of business premises. That said, given that creative manufacturing often links to enterprise and micro business, absolute levels of activity in the sector are likely to remain relatively small in comparison to other employment sectors; this is likely to remain a relatively niche sector.

4.229 There are a number of opportunities to diversify the sector within the OPDC area in the future:

- Embedding the creative manufacturing sector within place making aspirations – linked to the above, the creative manufacturing sector has strong place-making potential. Embedding the sector (craft manufacturing and retail) within new developments could serve a twin purpose of helping to create sense of place and identity and also supporting local start-ups and SMEs
- Supporting the development of the Circular Economy – as with other manufacturing sectors, there are strong potential links to the circular economy, particularly around reuse of waste.

4.230 Recommendations on how the sector can be supported – including the locations where growth might be expected – are provided in chapter 6.

Advanced manufacturing

4.231 Advanced manufacturing encompasses some of the eight great technologies in which the UK is set to be a global leader, including robotics and autonomous systems, and advanced materials. These technologies form part of the UK Industrial Strategy released in 2012, and are seen as being well placed to increase their domestic and global markets. The High Value Manufacturing Catapult Programme was established in 2010 to merge the gap between innovation and commercialisation. The Catapult targets the strategic sub-sectors that play to UK's strengths and have most significant growth potential.

Table 4.13 Key Statistics for Advanced Manufacturing in the OPDC Development Area

	Year	**Advanced Manufacturing**
Number of Jobs	*2014*	**900**
Number of Businesses	*2015*	**5**
Employment change	*2009-14*	**+4%**
Employment LQ vs London	*2014*	**3.2**

Source: ONS BRES (2014) & ONS UK Business Count (2015)

Current Overview

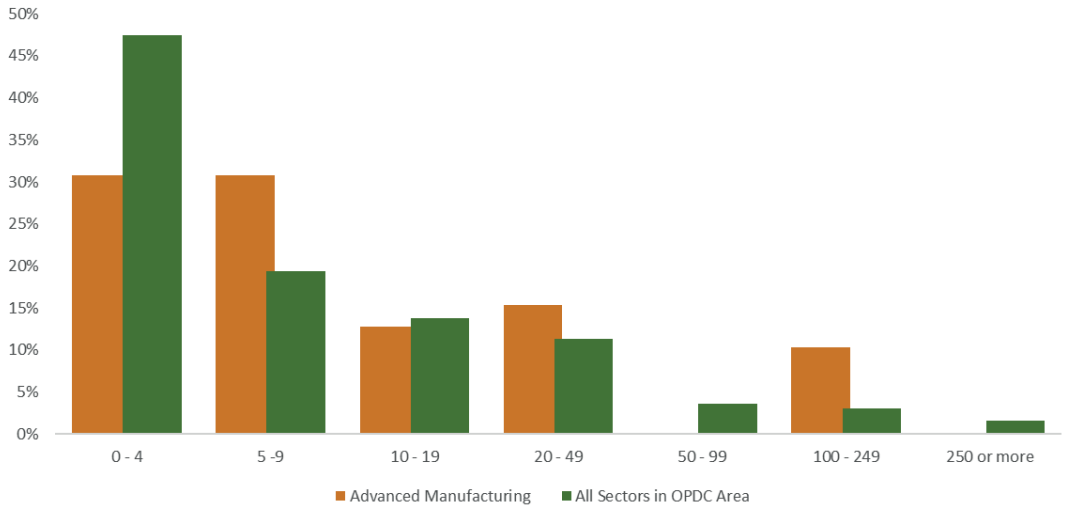
4.232 The advanced manufacturing sector currently employs 900 people in the OPDC development area across 10 firms. The sector accounts for 1.6% of employment and is specialised compared to London, with a location quotient of 3.2.

Advanced Manufacturing: Observational Analysis

Reflecting the relatively small and niche nature of the sector, advanced manufacturing is not identified as a separate sub-sector within the Park Royal Atlas. The Atlas identifies around 200 manufacturing workspace which are non-food manufacturing, covering 210,000 sqm of floorspace; the proportion of these which are advanced manufacturers is unknown.

4.233 Advanced manufacturing businesses are generally larger than the average business size in the OPDC area, with an average of 26 employees per business. However, small businesses do make up a significant proportion of employment in the OPDC area, with 62% employing fewer than ten people. Around 10% of advanced manufacturing businesses employ between 100 and 249 people compared to only 3% across all sectors.

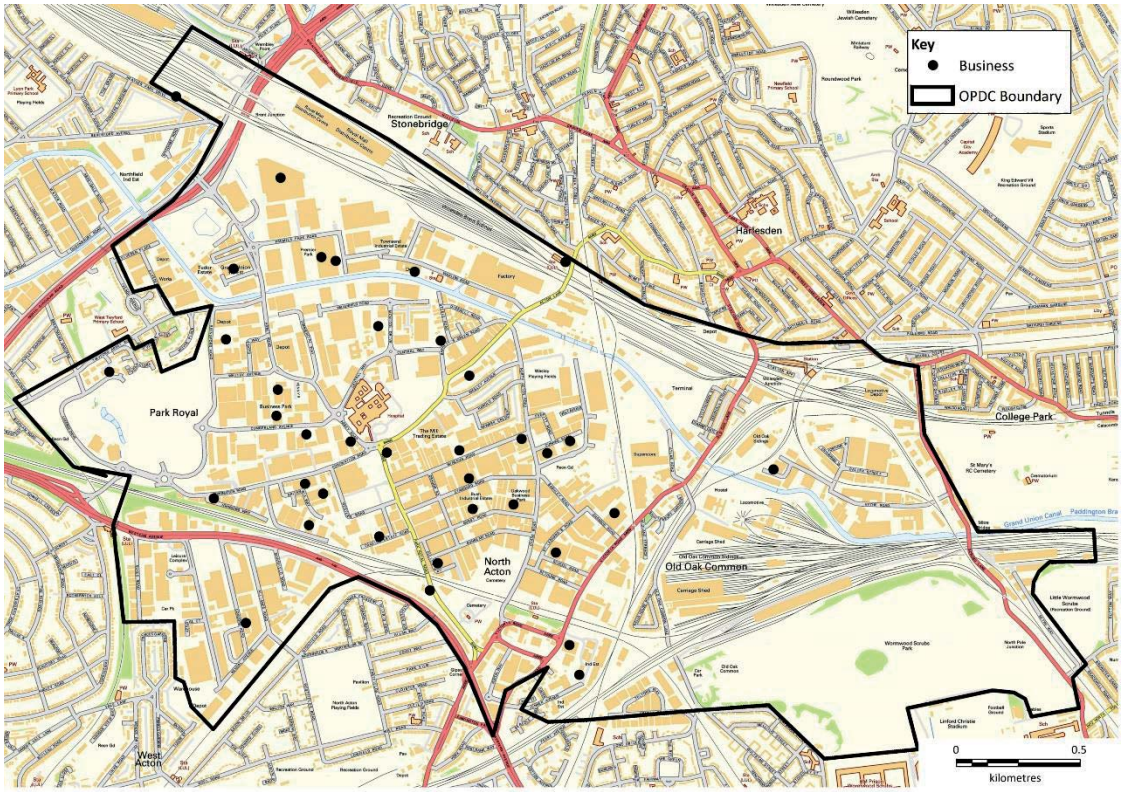
Figure 4.13 Size of Advanced Manufacturing Businesses in the OPDC Area



Source: IDBR, 2016

4.234 Businesses are well dispersed across Park Royal industrial estate, with no clear clusters of activity.

Figure 4.14 Distribution of Advanced Manufacturing Businesses in OPDC Area



Source: ONS IDBR, 2016

4.235 Key employers within the advanced manufacturing sector include Environmental Business Products, Delphi Diesel Systems and ITH Pharma.

4.236 Virtually all jobs within advanced manufacturing are full time, accounting for 97% of all employment. This is a similar level to London (95%) and nationally (94%).

Economic Demand

4.237 Advanced manufacturing within the OPDC development area is a growing sector, with employment having increased by 4% over the last five years. This compares to employment declines experienced across the West London Alliance (-14%), London (-20%) and nationally (-2%).

4.238 Advanced Manufacturing has been identified as one of the Government's priority growth sectors, due in part to the role it is playing in rebalancing the UK economy. It generates high value per employee, accounting for 20% of all UK manufacturing output with only 5% of its employment. In the OPDC development area, the advanced manufacturing sector has a much higher productivity compared with other manufacturing sectors, producing £88,800 GVA per worker compared to £62,700 across the whole manufacturing sector. In total advanced manufacturing businesses in the OPDC development area produce £76.4 million GVA per annum.

4.239 There are a number of factors that are influencing the sector's growth and development across the UK. These include:

- **International demand**: the sector's success is less reliant on domestic market demand and the vitality of other economic sectors than other parts of the economy. International demand and the health of the global economy is influential.
- **Technological advancement**: the sector is driven by continuous technological advancement that increases efficiencies and value generation. Firms must continue to adapt the latest technologies to remain competitive.
- **Skills gaps**: the sector is knowledge intensive, requiring high skills levels. The future success of advanced manufacturing activities will rely on the sector's ability to access the amount of skilled labour to meet its needs.[47]

4.240 Key enabling technologies for the sector includes robotics and other forms of automation, material processing devices and machines. These are reducing in relative cost, increasing in capability and widening their potential application to low volume, niche and SME friendly manufacturing opportunities.

4.241 Despite the national level policy emphasis being placed on advanced manufacturing, employment forecasts project a decline in employment in the sector across London in the period to 2041, in line with wider manufacturing activities.

Employment / Economic Opportunities

4.242 There are a variety of jobs available within the advanced manufacturing sector. Alongside traditional manufacturing jobs (such as machine operatives and manual labourers) there is a drive towards research and development, which typically employs more highly educated researchers.

4.243 A transition towards the advanced manufacturing sector has the potential to improve the productivity of London's existing manufacturing base, as well as supporting other innovation-led sectors including the low carbon and med-tech sectors.

4.244 The sector's higher productivity means that firms are able to afford higher rents whilst remaining competitive.

4.245 As with other sectors, the extent to which Park Royal can expect continued growth in advanced manufacturing will partly depend upon the extent to which industrial land continues to be lost

[47] UKCES (2012), *Manufacturing Sector Assessment*

elsewhere in London. Park Royal's status as strategic industrial land could help to attract more of these firms to the area.

4.246 Access to the latest research and development is critical, and so close proximity to London's universities is important to many firms wishing to remain competitive. Park Royal could also benefit from proximity to a number of research and innovation assets such as the Francis Crick Institute in Central London and the Imperial West development at White City.

4.247 Park Royal also has the potential to deliver bespoke new space in the long term in the form of an industrial business park once HS2 safeguarded sites are released. Depending on future demand, this could prove an ideal opportunity to delivery bespoke space to suit the needs of higher tech manufacturers.

Spatial Requirements

4.248 As noted above, business sizes in the sector in the OPDC area vary significantly; however, there is an average size of 26 employees, which is slightly larger than the overall average across all the sectors (25).

4.249 Typical sites for advanced manufacturing businesses include strategic sites, strategic mixed-use and major business parks to take advantage of R&D facilities. The advanced manufacturing sector has very similar spatial requirements to the general manufacturing sector, however there is a greater need for R&D space to enable businesses to undertake innovative research alongside production.

4.250 Similar to manufacturing, advanced manufacturing firms typically require a larger plot with purpose built premises, good communications and access to large and growing markets and key customers. HCA guidance states that average employment densities for manufacturing activities are 36 sqm per FTE for general industrial space (B2), 47 sqm for light industrial space (B1c), and 40-60m2 per FTE for R&D space (B1b). However, evidence from the OPDC Industrial Land Study suggests that higher densities for industrial space of up to 20m2 per FTE could be achieved within the OPDC area (e.g. within an Industrial Business Park or as part of future mixed use development).

4.251 Incubator and accelerator spaces can also play an important role in developing and supporting innovative SMEs.

4.252 Advanced manufacturing businesses show some propensity to cluster – this is particularly the case for smaller businesses, and / or where there is a research asset / institute acting as an anchor hub.

Spatial Analysis from the Park Royal Atlas

In Park Royal, the Atlas identifies around 200 manufacturing workspace which are non-food manufacturing, covering 210,000 sqm of floorspace. While the proportion of these which are advanced manufacturers is unknown, it is worth noting that these are largely distributed across workshops, small warehouses and large warehouse. The average size of non-food manufacturing workplaces is 1,100m2.

Other Supporting Infrastructure

4.253 The higher GVA produced per worker within the advanced manufacturing sector means that they are able to afford higher rents than general manufacturing firms. That said, to aid the relatively high levels of R&D investment, businesses in the advanced manufacturing sector often require some form of government support. This can be in the form of an Enterprise Zone which offers Business Rates relief and enhanced Capital Allowances.

4.254 As noted previously, proximity to research institutes or universities is often key either in supporting collaboration and in supporting commercialisation and spin out.

4.255 Newly established firms within the advanced manufacturing sector often require support in the initial stages as products have to be fully developed before production can begin. Support through subsidised research and development space, business support and networking opportunities will enable young firms to quickly develop products for market.

4.256 There are very different styles of manufacturing business with very different skills required to optimise business performance for different product market strategies and at different stages of product life cycle maturity. This is a challenge for large companies, which have a number of ways to keep pace with the requirements of skill set change, let alone SMEs which make up the bulk of employment in the sector.

4.257 Skills which are currently lacking in the advanced manufacturing sector, but which offer firms a competitive advantage include[48]

- Research and development skills and design skills
- Good technical expertise within Associate Professional and Professional roles, in response to technical change and the R&D demands placed on firms.
- Increasing importance attached to supply chain management skills.
- Technically competent workers at craft and operative levels.

Learning from Elsewhere

4.258 A number of case studies have been identified which provide interesting examples of advanced manufacturing activity taking place elsewhere in the UK. These include:

- The Central Research Laboratory, Hayes – the Central Research Laboratory (CRL) is located at The Old Vinyl Factory in Hayes and is an incubator space for manufacturing entrepreneurs. CRL is the product of a partnership between Brunel University London, regeneration specialists U+I and the Higher Education Funding Council for England. CRL supports manufacturing entrepreneurs at every stage of their journey – from industrial design to user research, raising investment and manufacturing operations. It provides a prototyping workshop, mentoring programme, workspace and in-house expertise to support and help accelerate growth.
- Sheffield Advanced Manufacturing Park – Sheffield and Rotherham are working to create the first Advanced Manufacturing Innovation District in the UK. The park will be Europe's largest research-led advanced manufacturing cluster, centred around the Sheffield-Rotherham corridor, focused on the University of Sheffield's Advanced Manufacturing Research Centre (AMRC) and the wider Advanced Manufacturing Park (AMP) at Waverley. There is a focus on materials and structures typically used in precision industries (aerospace, automotive, medical devices etc). The AMP is home to world-class research and manufacturing organisations including: the University of Sheffield's AMRC with Boeing; Rolls-Royce and the Nuclear AMRC. The AMP Technology Centre provides flexible office and workshop space to a cluster of manufacturing, engineering and sustainable energy companies located in two purpose designed buildings. The case study highlights the important role that HEI can play in supporting cluster development; it also provides an example of where businesses are incentivised to locate (the cluster has Enterprise Zone

[48] UKCES, 2012, Sector Skills Insights: Advanced Manufacturing

status); it also highlights that flexible space for SMEs can be important in supporting enterprise and innovation in the sector.

- Silicon Gorge – Silicon Gorge refers to the numerous high-tech and research companies in the triangle of Bristol, Swindon and Gloucester; it has been identified as the fastest growing high-tech cluster outside of London (Centre for Cities, 2015). It home to tech companies including HP, Toshiba and IBM and aerospace specialists Airbus, Rolls Royce and BAE. The area is also home to creative and innovative small and medium companies – such as Dyson and Aardman Animation. The cluster builds on a history of regional specialisation, large number of research institutions (Bristol, UWE and Bath universities) and a skilled and well-qualified workforce. Again, the case study highlights the importance of strong relationship with local universities, the need to work to develop and support innovative SMEs (these are the next large multinationals) and the importance of business incubators in providing cheap and flexible workspace for developing firms.

4.259 Information on both these case studies is provided in the Appendix A.

Opportunities for Old Oak Royal and Park Royal

4.260 Like creative manufacturing, the advanced manufacturing sector is currently comparatively small in the OPDC area. That said, there is evidence that employment is more concentrated locally than elsewhere in London and there has been a small amount of growth in recent years.

4.261 Employment forecasts project a decline in employment in advanced manufacturing sectors across London in the period to 2041, in line with wider manufacturing activities. That said, given Park Royal's existing manufacturing strength, its accessibility, the pressure being placed on manufacturing land elsewhere in London, and the policy emphasis on innovation and advanced manufacturing at both the London and national levels, there appears potential for consolidation and growth in the sector locally in the future. Like with creative manufacturing, such growth is likely to be relatively small in scale, but could help to strengthen Park Royal's image in terms of production, innovation and technology.

4.262 There are a number of opportunities to diversify the sector within the OPDC area in the future:

- Research and innovation– advanced manufacturing is continually evolving and innovating both in terms of the production process and also the products. Building on the existing strengths, proximity to research institutions and future transport enhancements, there could be potential for the OPDC area to a more leading role in research and innovation
- Supporting the development of the low carbon economy – the potential to develop a clean tech cluster in the OPDC area has strong cross links to advanced manufacturing. A strong low carbon economy will require new processes to be embedded within existing firms, and new products and technologies to be developed. Innovation and research within the advanced manufacturing sector to help develop products and processes is thus an important opportunity.

4.263 Recommendations on how the sector can be supported – including the locations where growth might be expected – are provided in chapter 6.

Low Carbon

4.264 The low carbon sector captures a wide range of activities within the economy, and is very hard to define due to the nature of the sector. A study for Yorkshire Cities (2011) on opportunities for green jobs provides one of the most coherent and logical frameworks for thinking about the low carbon economy and its components. It splits the low carbon economy by its underlying strategic drivers, and accommodates the fundamental point that within individual sectors and even businesses, some activities may be in low carbon markets whilst others are not. The four main strategic drivers identified in the study are:

1) **Decarbonising the Energy System** – focussing mainly on low carbon electricity production and distribution and low carbon transport.

2) **Improving Resource Efficiency** – including a range of activities mainly focusing on waste management, recycling and reuse, sustainable material and eco-design.

3) **Preserving and Enhancing the Natural Environment** – consisting of green infrastructure, sustainable agriculture, bio-diversity etc.

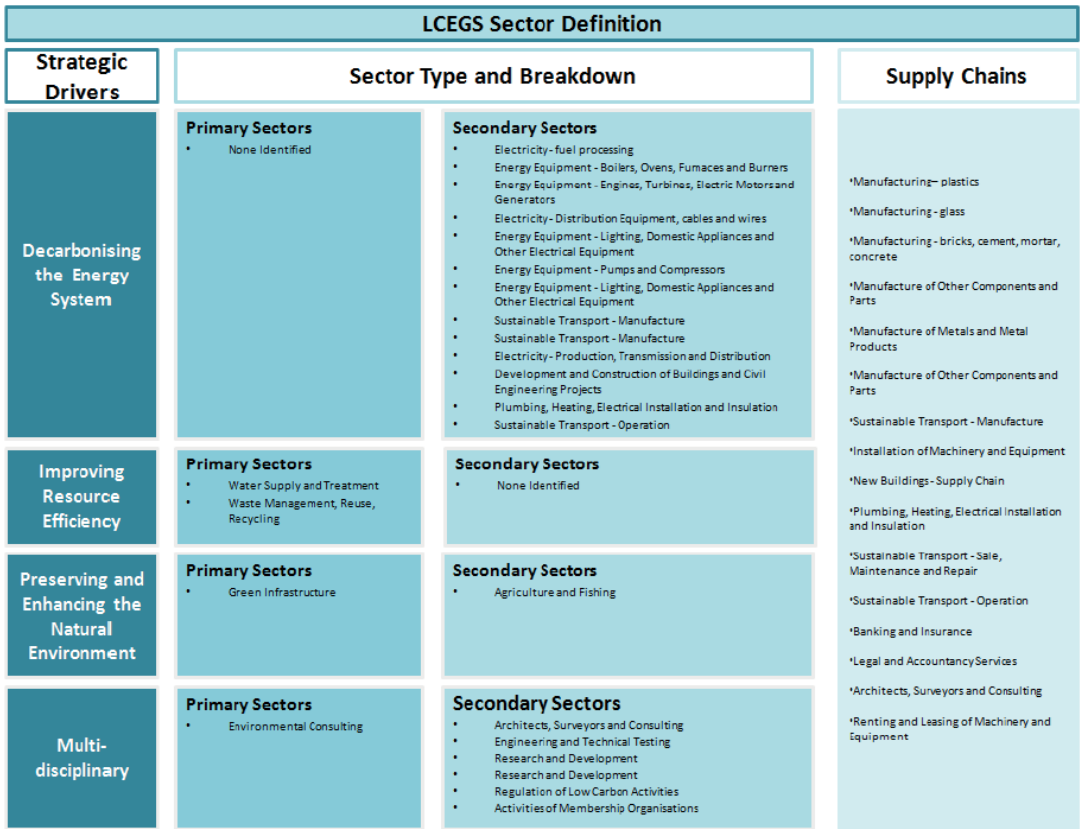
4) **Multi-disciplinary** – incorporating activities such as consultancy and Research and Development, which operate across all three of the above segments.

4.265 In addition to these core low carbon activities, the sector has a number of important cross linkages with other sectors cutting across the economy. Many business and activities will have low carbon practices embedded within their wider activities, even if they are not specifically low carbon businesses.

4.266 Reflecting the above, there are many different definitions used for the Low Carbon economy. This makes it challenging to define using traditional Standard Industrial Classification (SIC) codes. Regeneris has developed its own model to classify the Low Carbon economy in Environmental Goods and Services (LCEGS), breaking the economy into primary, secondary and supply chain activities (using a similar approach used by BIS and DECC in defining the sector at the national level).

- **Primary Activities** – these are activities which can be categorised solely as LCEGS activities and which have their own SIC code. As such, we assume that all jobs / businesses in these activity areas are in the LCEGS sector;
- **Secondary Jobs** – these are activities which are likely to include some LCEGS jobs / businesses, alongside non LCEGS jobs / businesses. As such, based on research from elsewhere in the UK, the Regeneris model makes assumptions around the proportion of the activity which can be classified as LCEGS;
- **Supply Chains** – we have also identified the supply chain activities which are likely to be involved in the LCEGS sector. The model seeks to identify the presence of these activities rather than identifying the proportion which are actually involved in LCEGS supply chains.

Figure 4.15 Regeneris model for defining the Low Carbon Environmental Goods and Services (LCEGS)



Source: Regeneris Consulting

4.267 It is important to note that the businesses and employees defined within this sector will not necessarily be operating in core Low Carbon sectors. In many cases, companies will have a profile which means that they are well placed to work within the LCEGS sector, but may not currently be realising their potential in this specific area.

Table 4.14 Profile of the Low Carbon Economy in the OPDC Development Area

	Employment	LQ	Employment Change (2009 – 14)
Primary	300	0.9	+100%
Secondary	900	1.4	+18%
Total	**1,200**	**1.2**	**+32%**
Supply Chain	100	0.5	+9%
Total (inc. Supply Chain)	**1,300**	**1.1**	**+29%**

Source: Regeneris Consulting based on ONS BRES (2014)

Current Overview

4.268 Using our low carbon model, we estimate there are around 1,200 jobs and 30 businesses in the primary and secondary sectors with an additional 100 jobs in the low carbon supply chain. Of these, around 300 jobs are more likely to be directly involved in low carbon activities.

4.269 The sector is more concentrated in the OPDC development area than in London, with a location quotient of 1.2, with a strong concentration of activity in secondary sectors (LQ = 1.4). Employment has been growing strongly in the last five years, with growth of around 32% across primary and secondary low carbon activities.

4.270 Low carbon activities are not specifically categorised within the Park Royal Atlas.

Economic Demand

4.271 Employment within the low carbon economy has been growing within the OPDC development area over the last five years. The overall low carbon sector has grown by 32% over the last five years, with strong growth in the primary sectors (+100%) and secondary sectors (+18%). The supply chain activities associated with the low carbon economy have also experienced growth (+9%).

4.272 The Green Economy is a priority growth sector for the UK economy. It is at the heart of government policy in terms of reducing emissions, driving innovation and the provision of high value added jobs.

4.273 The Department for Business, Innovation and Skills (BIS) estimates that the sector currently supports GVA of £120 billion and employs around 0.9 million people.[49] The sector equates to a very small proportion of UK employment but the GVA created per employee is much greater than the economy's average.

4.274 There are a number of drivers influencing the performance of the sector nationally:

- **Climate change and sustainability**: these are major global, political and social issues which are driving the impetus for growth in this sector.
- **Creating energy security**: linked to the above, there is a desire to achieve greater energy security in the UK, with less reliance on foreign energy supplies.
- **Technology and innovation**: the sector is driven by technological advancement that increases efficiencies and value generation. For companies to remain competitive in this sector they must ensure they are up-to-date with the leading technologies and applications.
- **Competition**: there is significant competition from overseas in the Green Economy. The extent to which it can represent a viable opportunity for economic growth at the local level will be dictated by the sub-sector specialisms that can be developed locally.[50]

4.275 While projections for future low carbon employment are not available, given the strong policy emphasis on the green economy and low carbon activities, the size of the sector across the UK might be expected to increase. Low carbon activities can be most closely linked to manufacturing activities (projected to decline in employment across London in the period to 2014), construction activities (projected to increase), and professional and business service activities (projected to increase in London in the period to 2041).

Employment / Economic Opportunities

4.276 The Low Carbon sector is a key priority for London, as referenced within key policy documents including the London Plan, London LEP Economic Strategy and a City for all Londoners .

[49] BIS (2012), Low Carbon Environmental Goods and Services

[50] UKCES (2012), *Energy Production and Utilities Sector Assessment*

4.277 A number of specific opportunities have been identified within the low carbon sector which are of relevance to Park Royal:

- **Cleantech** – The London Sustainable Development Commission was established in 2002 to advise the Mayor of London on making London a 'sustainable world city'. In their "Better Future: A Route Map to Creating a Cleantech Cluster in London", LSDC has subsequently identified the potential to create a 'Cleantech Cluster' at Old Oak and Park Royal (OOPR). In this context, cleantech usually refers to technology for low-carbon, renewable energy and covers technologies that address the causes and effects of climate change via: low-carbon energy, energy and resource efficiency, system efficiency, climate change resilience and greenhouse gas removal. OPDC and the neighbouring Imperial White City (IWC) development are identified as a unique opportunity for creating a world-leading cleantech cluster given that OPDC is Europe's largest urban development with sustainability written into its vision, IWC will become a world leading research and innovation campus, Imperial College London and Climate-KIC UK are world leaders in Cleantech start-up creation and that OPDC will be in the midst of the best communications and transportation infrastructure in the UK. *The OPDC Cleantech Cluster Feasibility Study, undertaken alongside this report, explores this in more detail.*
- **Circular economy** – OPDC is also currently working with the London Waste and Recycling Board (LWARB) to explore the potential to develop and maximise potential relating to London's circular economy. In the (former) Mayors Infrastructure Strategy, an ambition is stated that London becomes a world leader in the development of the circular economy. LWARB has subsequently been exploring this further: 'Towards a circular economy – context and opportunities' report, identifies five areas for initial focus: the built environment, electricals, textiles, food and plastics. LWARB also identifies the value of working to embed circular economy principles in the 38 opportunity areas identified through the London Plan. Park Royal strengths in manufacturing and logistics suggest that it is a potentially strong testbed for the development of circular economy principles and priorities.

Spatial Requirements

4.278 The spatial requirements for firms in the low carbon economy varies depending on the type of activity businesses undertake. Those involved in low carbon manufacturing will have similar requirements to the advanced manufacturing sector, with B2 space (industrial & manufacturing) alongside R&D space for innovation in low carbon technologies. Those involved in some other sectors of the low carbon economy, such as environmental consulting, would require office space, which is typically 12 sqm per employee.

4.279 Businesses within the low carbon economy have a high propensity to cluster which helps them access leading technologies and establish an innovative environment. Close proximity to centres of excellence or HEIs is important in this regard, allowing businesses to take advantage of the latest technologies. These clusters often require government support in order to begin clustering.

4.280 Close proximity to skilled labour is also important given the R&D required by the sector, and good access to graduates from local universities helps. To help attract this type of workforce, excellent infrastructure and a pleasant working environment are beneficial to firms when choosing where to locate.

4.281 Firms within this sector are typically located in major business parks (especially manufacturing firms) and in town and city centre sites (for office-based employment).

Other Supporting Requirements

4.282 As noted above, the low carbon sector cuts across a range of other sectors – including manufacturing, logistics, construction and business services. With this in mind, low carbon polices and supporting requirements need to targeted as overarching principles and priorities which both support specific low carbon businesses, but which also support existing business to innovate and to transition to low carbon processes and activates.

4.283 The Low Carbon sector is a broad sector requiring a broad range of skills and specialisms. As such, it is important to identify the nature of emerging opportunities and their skills requirements:

Table 4.15 Summary of Skills Needs for a Green Economy

Skills for a Green Economy	Skills Needs
Skills supporting **resource Efficiency**	All businesses need generic or light green skills including: • Strategic business management to build resource-efficient business models leading to bottom line benefits and in preparation for new regulations • Business/financial accounting services around carbon and natural environment accounting • Skills to design and adopt technologies, products and processes increasing resource efficiency, including lean manufacturing • Project management skills with clear understanding of resource efficiency • Operator level actions to maximise resource efficiency (e.g. reducing waste in production).
Skills supporting **low carbon Industry**	Low carbon industry focuses on energy generation and industry with high energy requirements. Skills include: • Scientists and engineers with training or transferable knowledge for nuclear and renewable energy (including wind and marine) • Technicians with training or transferable knowledge to install energy efficiency measures and retrofit at a household and business premises level • Skills to design and adopt technologies, products and processes to minimise carbon emissions • Operator level actions to minimise carbon emissions (e.g. driving in a fuel efficient manner).
Skills supporting **climate Resilience**	Business requires the capacity to adapt to changes in climate. The necessary skills include: • Scientific and technical skills such as modelling and interpreting climate change projections • Risk management such as assessments of future resource availability • Skills to design and adopt technologies, products and processes to improve climate resilience • Operator level actions to improve climate resilience (e.g. retrofitting water efficient technologies in households and business premises).
Skills to **manage natural Assets**	Natural assets underpin all business practice. Skills to protect and manage them include: • Accounting services for the natural environment • Understanding of environmental impact assessments • Understanding and interpretation of environmental legislation targets, ecosystem services design and management and land use planning • Skills to design and adopt technologies, products and processes to manage natural assets.

Source: Skills for a Green Economy, HM Government, 2011

Learning from Elsewhere

4.284 A number of case studies have been identified which provide interesting examples of low carbon clusters. These include:

- The Copenhagen Cleantech Cluster – The Copenhagen Clean Tech Cluster (CCC) is a group of businesses which work to develop and deliver solutions to tackle challenges relating to improving efficiency in the life cycle of products. The cluster opened in 2012, it is 40km north west of Copenhagen, with around 15 Clean Tech companies operating in the area and employing 1,300 people. 370 hectares of space has been assigned to the Copenhagen Clean Tech Park in line with the city Masterplan. R&D support is provided through the central government, municipalities and close cooperation with local Universities. Important lessons for the OPDC area are the importance of allocating space for clean tech activities and the need for close interactions with local research institutions.
- Cleantech San Diego – a not for profit membership organisation which is aiming to establish the San Diego region as a global leader in the cleantech economy. The partnership includes local businesses, universities and government and aims to help collaboration, lead advocacy to promote cleantech priorities and to encourage investment.
- Kitakoyushu, located in western Japan, has ambitions to be known as the 'environmental capital of the world'. In the 1960s, it was one of the four largest industrial zones in Japan. High levels of pollution forced the government to take action. The Japanese government have identified the city as an EcoModel City, with a goal to reduce city-wide CO2 emissions by 50% by the end of 2050. As part of these efforts the Kitakoyushu Asian Centre for Low Carbon Society was established in 2010, with strong R&D links to local firms and an outreach programme for businesses across Asia. The Kitakyushu Ecotown Program emphases the promotion of environmental and recycling industries, with a focus on recycling electrical appliances, automobiles, plastic bottles and other recyclable wastes. Connections established with local universities have helped ensure latest low carbon technology is used by firms. Kitakoyushu was born out of a need to react to challenges facing the local area, and the need to innovate around these to improve the local environment. In the beginning, Kitakoyushu was very much a government-led initiative, however this model has now transferred to all areas of the economy. The key lesson is the importance of strong city level governance to provide a long term framework to guide change.

4.285 Further case study information is provided in the Appendix A. *Further case studies are explored within the OPDC Cleantech Cluster Feasibility Study, undertaken alongside this report.*

Opportunities for Old Oak Royal and Park Royal

4.286 While the evidence does not suggest that Old Oak and Park Royal currently has a specific strength in low carbon activities, it has strengths in a number of the cross cutting sectors which are interact / engage with the low carbon agenda.

4.287 Given the strong policy emphasis on the green economy and low carbon activities, the size of the sector across the UK might be expected to increase. Low carbon activities can be most closely linked to manufacturing activities (projected to decline in employment across London in the period to 2014), construction activities (projected to increase), and professional and business service activities (projected to increase in London in the period to 2014).

4.288 The extent to which Park Royal is able to harness growth in the sector will partly reflect its performance in these wider sectors, but also its ability to provide specific space to accommodate

emerging low carbon technologies. A specific opportunity has been identified to establish a clean tech cluster in the area, linked to business incubator activities at Imperial West. There are a number of related opportunities:

- Low carbon technologies – building on the existing manufacturing strengths, and links to HEI (Imperial West), provide space for businesses undertaking innovation and research into low carbon processes and products
- Low carbon construction – the scale of development at Old Oak presents opportunities to delivery schemes which are exemplar in terms of their sustainable credential
- Sustainable transport – there are numerous opportunities to establish sustainable transport credentials including via better use of existing asset (eg rail and water) to reduce dependence on roads, and, in the longer term, exploring the potential to test and deliver new urban transit systems.
- The circular economy (including waste and energy) – there is potential to develop a strong circular economy in the area, focusing on changing behaviour and processes in existing sectors such as food manufacturing and transport and logistics. This includes more effective models to reuse manufacturing waste, and the potential to develop local capacity for sustainable energy generation.

4.289 *The OPDC Cleantech Cluster Feasibility Study, undertaken alongside this report, explores future opportunities in more detail.*

4.290 Recommendations on how the sector can be supported – including the locations where growth might be expected – are provided in chapter 6.

Life Sciences

4.291 The life sciences sector (also known as medical technologies) is a rapidly evolving sector which focuses on developing new healthcare products with a focus on R&D and innovation. Here, the sector is taken to include the supporting industries for health care – including life sciences, pharmaceutical R&D and biotechnology.

Current Overview

4.292 Official statistics suggest that the life sciences sector has a very limited presence in the OPDC area, with approximately 50 people employed in 10 businesses. These businesses are well dispersed across the area, with no significant clustering.

Economic Demand

4.293 While life sciences activity in Park Royal is currently limited, London forms part of the 'Golden Triangle' of Oxford, Cambridge and London – reputedly the strongest biosciences cluster in Europe. According to recently published research[51], the Southeast, London and East of England collectively contain 48% of the Life Sciences employment in the UK, with London employing approximately 18,000 people. These are typically high value added activities: there is a strong focus on R&D and innovation within these businesses.

4.294 The life sciences sector plays a key role in the national government's economic and innovation strategies given its role in helping to support the rising demands of an ageing population. The Government has identified the development of health care and its supporting industries in life sciences, including pharmaceutical R&D and biotechnology as a key priority. This sector has been identified as a key sector of growth for the national economy, with the potential to contribute high value added activities and employment[52].

4.295 Some of the most important drivers likely to influence future sector growth in the UK are outlined below[53]:

- **Regulation and Governance** – Future government policy regarding expenditure and public sector funding for health and care will influence the future of the sector. The regulation of services and registration of care workers will also be important, impacting significantly on the quality of services and skills and also on financial margins of businesses.
- **Demographic Change** – As previous discussed, population ageing is a significant consideration – in 2017, for example, nationally there are projected to be 1.74 million people aged over 85, compared to 1.34 million in 2008. This will create an increasing number of age related ill health and disabilities which will result in demand for more medical technology.
- **Consumer Demand** – There is some evidence to suggest that aggregate consumer demand is shifting towards greater levels of expenditure on health related products and services than was previously the case. Again, this is likely to result in higher demand and hence greater levels of employment.

[51] MedCity, 2016, Planning for Growth – Demand for Healthcare R&D Space in London

[52] UKCES (2012), *Health Sector Assessment.*

[53] Barclays (2012), *UK Healthcare Sector Outlook.*

- **Technological Changes** – Projections suggests that assisted living (including Telecare and Telehealth) will play an important role in managing health and supporting older people's independence. Life sciences will play an important role in providing new technologies which can aid older people.
- **Changing models of care / living** – Allied to the technological changes described above, changes are also anticipated in terms of the types of accommodation and locations within which older people retire to and are cared for. This applies across the board, not just changing models of care for older people, but also in how primary and secondary care is delivered by the NHS.

Employment / Economic Opportunities

4.296 Life sciences is an important policy focus of both the government and the GLA. This policy focus reflects the fact that London forms part of the 'Golden Triangle' of Oxford, Cambridge and London, the strongest biosciences cluster in Europe.

4.297 The policy commitment is emphasised by the significant investments being made in projects such as the Francis Crick Institute and the Alan Turing Institute. MedCity: Planning for Growth reports that "growing ambition for enhanced collaboration, particularly by strong universities in London and the presence of Academic Health Science Centres and Networks means that there is considerable potential for enhancing and increasing the commercial R&D activity in the healthcare sector in the capital".

4.298 While the sector currently has a relatively small presence in the OPDC area, there is potential for this to change in the future given the development of Imperial's White City Campus which is expected to provide R&D incubator space for life sciences businesses, and the transport improvements linking Old Oak and Park Royal even more closely to existing and proposed clusters of activity – including Whitechapel and Kings Cross.

4.299 Evidence from *MedCity: Planning for Growth*[54] shows that there is strong demand for Healthcare R&D space in London, with all existing innovation centre currently having waiting lists. It concludes that there is good demand for further healthcare R&D space to be provided, particularly if further investment is made in hard and soft infrastructure to serve the sector. However, there are also a number of competing life sciences clusters currently being developed in London which may reduce the demand for space in the OPDC area.

4.300 The main competitor is the Euston Road/King's Cross cluster, with current developments including UCL and the Francis Crick Institute being complemented by future developments at the British Library site, where there is potential for over 700,000 sqft of new space which would be delivered in the near future. This is already nearing completion, and looks set to attract a wide range of public and private research organisations to the area.

4.301 Other competition is likely to arise from the former Sanofi pharmaceutical manufacturing site in Dagenham, now branded Londoneast-uk, where there is a range of specialist laboratory, manufacturing and office buildings together with development land. Whilst some of the buildings are currently occupied by the Elutec College of Design and Engineering and are in part used as film locations, there is in total some 360,000 sqft of built space that can provide laboratory, office, GMP manufacturing and warehouse accommodation to Life Sciences businesses.

4.302 In terms of employment opportunities, businesses within the life sciences sector can be a wide range of sizes, ranging from smaller start-ups (or spin-offs) to large medical technology firms and other medical firms which have placed a greater emphasis on innovation and technology. Jobs

[54] MedCity, 2016, Planning for Growth – Demand for Healthcare R&D Space in London

within the sector are largely focused on research and development roles, with a strong emphasis place on people with science and technology skills. In addition, there are a number of manufacturing roles for the production process.

Spatial Requirements

4.303 Analysis from *MedCity: Planning for Growth*[55] shows that the types of floorpsace which are most needed in London are:

- Relatively small suites of accommodation close to research base – to accommodate spin-offs that want to remain close to their original faculty, and larger firms wanting to take advantage of the local research base
- Innovation Centre space – demand is currently exceeding supply for this space across London, even with the proposed Innovation Centre in the pipeline at White City.
- Grow on space – as businesses scale up, a number of businesses would want to remain close to research hubs to take advantage of local networks. Although additional capacity is being provided at White City and Dagenham, not all of this will meet the needs of some businesses.
- Space within/very close to hospitals
- Lounge/community space with meeting rooms – businesses not currently located in London would like to take advantage of London's healthcare R&D community, and these businesses would benefit from flexible access to these through this type of space.

4.304 As part of the MedCity report, businesses were surveyed to identify what type of space should be provided and the nature of this. 86% of respondents said that they would not be prepared to sign a lease of over ten years. Most start-ups or smaller businesses in the sector prefer shorter leases which fit in with R&D business plans and funding rounds. Typically lease terms of less than three years are sought by SMEs.

4.305 The quality of accommodation required ranges significantly[56], from businesses willing and able to pay relatively high property costs for good quality space to businesses keen to keep overheads low and quite content to accept lower quality accommodation. It is important to offer a range of property at a range of costs.

Other Supporting Requirements

4.306 Analysis from *MedCity: Planning for Growth*[57] suggests that proximity to transport hubs is identified as the most important criteria when choosing a location.

4.307 Being close to a university or hospital is also seen as beneficial.

4.308 Important amenities for these businesses are cafes, sports facilities and hotels and pubs, but overall accessibility is more important.

[55] MedCity, 2016, Planning for Growth – Demand for Healthcare R&D Space in London

[56] MedCity, 2016, Planning for Growth – Demand for Healthcare R&D Space in London

[57] MedCity, 2016, Planning for Growth – Demand for Healthcare R&D Space in London

Learning from Elsewhere

4.309 The Whitechapel MedCity project provides a strong example of sector development in the life sciences sector. MedCity focuses on the redundant Royal London site and will bring together all the medical sciences and disciplines that delve into public health. The campus is a partnership between Queen Mary University of London and Barts Health NHS Trust; it is spread over 2 hectares and is expected to create 3,500 jobs. The Life Sciences Institute will be a 24-hour campus with education, accommodation, leisure, clinical treatments and flexible workspaces for small and developing businesses. The QMB Innovation Centre is the largest purpose-built commercial lab space in London for start-ups in science and technology. Labs are available on a flexible basis and have been designed to house both microbiological safety cabinets and fume cupboards. There is an extensive service provider network providing support to smaller businesses. The case study demonstrates that connections to local universities and research institutions are vital to ensuring access to latest research; the role of innovation centres in supporting business and fostering links with businesses who have spun out of the campus; and the role of flexible lab space in developing for small and developing businesses.

4.310 Further case study information is provided in the Appendix A.

Opportunities for Old Oak Royal and Park Royal

4.311 The life sciences sector is currently comparatively small in the Old Oak and Park Royal area; there is no evidence of any current specialisation or clustering.

4.312 The sector is being prioritised for growth both across the UK and London. London's position within the 'golden triangle' means it is already well established, while investment in research and innovation assets such as the Francis Crick Institute and MedCity have the potential to help the sector grow and develop further in future years.

4.313 In the longer term, there may be potential for the Old Oak and Park Royal area to capitalise on its position within this wider London context, and its proximity to hospitals, major research assets (including Imperial West), along with enhanced infrastructure and environment. Old Oak and the Channel Gate site provide potential to deliver bespoke space and research facilities in the future should demand exist.

4.314 At the moment this is seen as a longer term sector opportunity, the nature of which will largely hinge on how activities develop at Imperial West and the extent to which demand emerges for spin out lab or research space, along with the wider evolution of the sector Whitechapel and Kings Cross. As such, the potential for local specialisation in the OPDC area should be reviewed in the coming years in partnership with Imperial, the GLA and wider partners.

4.315 Recommendations on how the sector can be supported – including the locations where growth might be expected – are provided in chapter 6.

5. Sector Growth Potential

Summary of Key Messages

- Aside from sector specific drivers, there are a range of wider factors which will impact upon the scale and nature of future growth within Old Oak and Park Royal.
- Locally specific considerations include the physical capacity for growth in the OPDC area (the amount and phasing of new floorspace), the transformational effect of the proposed transport enhancements, and the proactive planning and economic development policies of OPDC and its partners.
- Wider considerations include the overall trajectory of the UK economy and wider macro-economic considerations, the impact of other regeneration / development activity across London and the South East, and changes in technology and working practices.
- Taking into account these considerations, scenarios for future growth in the OPDC area have been considered. Reflecting the type of space being delivered, the majority of growth can be expected from the office based digital, media and creative sectors, and business and professional services sectors. Growth in industrial sectors is likely to be much smaller in scale, reflecting constraints in Park Royal capacity. While in the short term this is likely to be based around existing strengths (eg food and transport and logistics) which will become more valuable as technology drives productivity and efficiency; but this could also evolve to include other high value industrial sectors over the medium to longer term.

5.1 Building on the sector profiles set out in the previous section, this chapter considers the scale and timing of potential future sector growth in Old Oak and Park Royal and how this might be influenced by the activities of OPDC and its partners.

Key Factors Affecting Growth Potential

5.2 Aside from the sector specific drivers and influences outlined in the previous chapter, there are a number of overarching factors which will impact upon the scale and nature of future growth within Old Oak and Park Royal.

Local Considerations

The Physical Capacity for Growth

5.3 The scale of growth in Old Oak and Park Royal will to some extent be a function of the physical capacity of the area to accommodate new businesses and jobs.

5.4 Based on development sites and capacity[58], there is the potential to deliver up to 61,000 jobs over the plan period. It is estimated that this level of employment growth will support an additional £7.6 billion GVA per annum.

5.5 Growth projections comprise:

- Around 50,000 additional jobs on Old Oak sites. This includes a reduction in industrial employment in the region of 5,000 jobs, with growth in non-industrial employment (largely

[58] Draft Development Capacity Study and Industrial Land Review

offices, retail and leisure uses) of 54,000 jobs. The OPDC Development Capacity Study projects that the majority of this growth will come forward in the 2022 to 2037 period

- Around 4,000 additional jobs in industrial uses on Park Royal SIL largely via intensification
- Around 7,500 jobs in industrial uses on the Channel Gate site once released by HS2 (likely to be after 2026. The higher growth scenario would assume the delivery of Industrial Business Park (IBP).

Transport Enhancements

5.6 Linked to the above, the OPDC area is set to benefit from significant changes in accessibility as a result of the delivery of a new HS2 and Crossrail station, as well as new London Overground stations and improvements to existing stations in the area. These will position Old Oak as a transport superhub within the London context, with enhanced journey times and connections to London, the rest of the UK and global destinations via Heathrow.

5.7 These infrastructure enhancements have the potential to be transformational in terms of the attractiveness of the area to business occupiers, and help to establish its position as a key economic node in London.

Cost Sensitivities

5.8 The rising cost of employment and work space is a major factor influencing business performance and London's overall economic geography. While this affects all businesses and sectors, industrial activities and SMEs are particularly sensitive to increasing costs.

5.9 There is a risk that regeneration activity at Old Oak, and in particular the significant improvements to transport connectivity, will have a knock on effect on Park Royal, with the threat of substantial increases in land values. While there are many examples of successfully trading industrial areas located in close proximity to major transport hubs (such as Heathrow), in many ways, the OPDC context is unique in terms of the size of Park Royal and the scale of the transport enhancements and wider regeneration planned.

5.10 The protection of Park Royal as SIL will to a certain extent insulate against this threat, while in some cases some of the sectors and activities identified will need to remain in the area to be able to continue to serve London markets effectively.

5.11 That said, it is possible that rising value may result in displacement effects for industrial activities which are particularly sensitive to costs (for example business support services, motor trades and certain manufacturing, wholesale and logistics activities). To mitigate this, the Study has identified a range of measures to help support sectors, such protecting workspace which could be affordable to SME and identified sectors. Future innovation and change may also affect locational priorities, if new processes and technology changes the nature and viability of different sectors.

The Proactive Planning Policies of OPDC and Partners

5.12 In considering the nature of future growth in Old Oak and Park Royal, it is important to recognise the instrumental role that OPDC and its partners will play in shaping the area.

5.13 Compared to a reference case scenario (i.e. development that would come forward anyway), the coordination, place-making, economic development and wider delivery activities of OPDC have potential to add value in a number of ways:

- The scale of delivery – the proactive Local Plan, masterplanning and regeneration activities of OPDC are likely to help to maximise the development capacity of the area, both for new

development at Old Oak and for intensification of existing space in Park Royal. As such, the capacity for growth is likely to be higher than under a 'do nothing' scenario.

- The speed of delivery – it is likely that development will come forward quicker than might be the case in the absence of OPDC, impacting on the speed at which the local economy evolves.
- The quality and coherency of delivery – OPDC's activities are likely to ensure that the quality and coherency of delivery is greatly enhanced compared to a theoretical do nothing scenario. This has important implications for sector development, particularly for those sectors and activities which will be attracted by a high quality environment, high quality space and high quality infrastructure and amenities. In sector terms, this could mean: building on the area's existing economic strengths and its role in supporting London economy; creating new opportunities for other high value activities – both in new development and in existing parts of Park Royal and synergies between these.
- The coordination of economic development – OPDC also adds considerable value in its ability to coordinate the activities and strategies of different partners (eg GLA, TfL, the Boroughs, HEI, sector bodies and businesses) and to support economic linkages across wider areas. This will help to ensure a coordinated and coherent approach to economic development in the area, further supporting growth and sector development aspirations.

Wider Considerations

The Impact of a Competitive Economic Environment

5.14 The plan to deliver over 60,000 jobs at Old Oak and Park Royal is ambitious, particularly when viewed within the hugely competitive economic context in London and the south east.

5.15 Across London alone there are numerous regeneration and opportunity areas, each with aspirations to deliver significant numbers of jobs and homes. A summary of some of the largest of these regeneration areas is provided in Table 5.1, with additional detail provided in Appendix A. The table demonstrates that many of these areas are targeting growth in similar sectors: namely creative and professional service activities and retail.

5.16 Overall, employment growth of 1.13 million (+20%) is projected across London in the period to 2041, with 98% of this growth occurring in 'non-industrial' sectors of the economy:

- Around a third of this employment growth (350,000 jobs) is expected to occur in the Central Activity Zone
- The regeneration areas identified in Table 5.1 alone target 218,000 jobs in mainly non-industrial sectors, accounting for around 20% of London's projected growth
- The OPDC target of 54,000 non-industrial jobs would account for 5% of projected non-industrial growth in London.

5.17 While meant for illustrative purposes only, the above highlights the competitive nature of the London economic development and regeneration context: it is likely that Old Oak and Park Royal will be directly competing with many of these locations, along with established economic hubs such as the West End, the City and Canary Wharf, to attract businesses and investment. While Old Oak will benefit from the delivery of unrivalled transport infrastructure, competition will be tough given that it is currently an untested and unknown location for major offices uses.

Table 5.1 Summary of Major Regeneration Area Growth Aspirations

	Employ. Growth	Housing Growth	Sector Aspirations
King's Cross – St Pancras	+25,000 jobs	+1,900 homes	Creative sectors - esp. software and electronic publishing, advertising and video/film production; tourism; retail
Euston	+7,700 jobs	+2,800 homes	Knowledge, science and creative sectors
Paddington	+5,000 jobs	+1,000 homes	Professional services, retail
White City	+10,000 jobs	+6,000 homes	Creative, academic, technology and small business sectors (broadcasting at former BBC site). Healthcare and bio-technology.
Wembley	+10,000 jobs	+11,500 homes	Retail, offices, hotels, conference facilities, sports, leisure, tourism, creative industries and educational.
Brent Cross	+27,000 jobs	+7,500 homes	Retail, leisure and office-based sectors
Heathrow	+12,000 jobs	+9,000 homes	Logistics, hotels and leisure and tourism, bio-science, creative/media
Earls Court	+9,500 jobs	+7,500 homes	Leisure, cultural, visitor attractions, offices, retail, hotels.
Stratford (Lower Lee Valley)	+50,000 jobs	+32,000 homes	Financial and professional services, media and broadcasting, academic, retail
ABP Royal Docks	+6,000 jobs	+11,000 homes	Financial and business services, retail
Vauxhall Nine Elms	+25,000 jobs	+20,000 homes	Financial and professional services, public sector, leisure, retail
Canada Water	+2,000 jobs	+3,300 homes	Retail, leisure, creative
Greenwich Peninsula	+7,000 jobs	+13,500 homes	Professional services, media and broadcasting, retail
Croydon	+7,500 jobs	+7,300 homes	Professional services, leisure and retail

Source: Regeneris Consulting

5.18 It should be noted that each of the sectors is characterised by varying geographic reaches and influences. While some of the sectors are serving largely local and regional markets (and hence competition is mainly constrained to these levels), for other sectors, competition and influences reach out to the international level. This is the case for the office related sectors being targeted for growth at Old Oak (see below).

Table 5.2 Geographical reach of the key sectors

Food Manufacturing	Largely regional level competition and influences (where the sector is serving London)
Transport & Logistics	Largely regional level competition and influences (where the sector is serving the London economy)
Motor Trades	Largely local and sub-regional level competition and influences
ICT, Media & Creative	Subject to regional, national and international competition and influences
Business & Prof Services	Subject to regional, national and international competition and influences
Creative Manufacturing	Competition largely at the regional level
Advanced Manufacturing	Competition at the regional and national levels, but subject to international influences and drivers

Low Carbon	Low carbon principles need to be embedded across all businesses in the economy, but international competition for low carbon technologies and manufacturing
Life sciences	Subject to regional, national and international competition and influences.

Source: Regeneris Consulting

5.19 Reflecting all the above, OPDC and partners have a critical role to play in planning and phasing delivery in such a way which is cognisant of both London wide economic trends and demand, and the delivery investment activities of competitor areas. Specific actions to proactively target and attract anchor tenants to the area can play an important role in helping to create a sense of place / economic identity and in catalysing inward investment. Apple at Nine Elms and Google at King's Cross are two recent examples of where high profile anchor tenants have been successful secured at an early development phase.

Macro-Economic Considerations

5.20 In considering future economic demand, it is important to consider wider macro-economic conditions given the important influence that these will have on local economic and sector development in London and the OPDC area itself.

5.21 At the headline level, the Spring 2016 London Economic Outlook[59] reports that *"the economic environment in the UK and London has remained generally sound although displaying evidence of the continuing moderation in growth that was seen throughout 2015".* A range of economic indicators suggest continued expansion of London's economy but with signs of a moderation in growth.

5.22 The UK economy continued to grow in the first part of 2016, with output increasing by 0.4 per cent in quarter 1. UK GDP now stands 7.3 per cent higher than its pre-recession peak.

5.23 Risks to the economy include the impact of Brexit (see box below) and ongoing austerity measures. In addition, slow growth in Europe, the levels of sovereign debt and the structural problems facing individual countries, their financial systems and the Eurozone as a whole remain key concerns due to the impact these could have on the UK and London's trade. Low oil and commodity prices are also impacted economic performance globally and particularly in emerging markets.

5.24 The London Economic Outlook concludes that "the outlook for the London economy still remains positive for the coming years" with increasing output and employment. That said, there are some early indications of a wider global slowdown; were this to occur, this would act as a break on the UK and London economies.

The Impact of Brexit

The likely economic impact of Brexit is as yet unclear.

An economic slowdown (and potentially recession) was widely predicted as a short term consequence of Brexit, and as a result growth projections have been reduced and monetary measures introduced by the Bank of England including quantitative easing and a further reduction in interest rates.

Early indications suggest that the UK economy is proving relatively resilient to date, with better than expected levels of consumer spending and manufacturing performance during summer

[59] GLA Economics, London Economic Outlook, Spring 2016

2016. That said, the impact of Brexit on the strength of the UK economy is likely to only be apparent over the longer term.

It is also unclear to date how the restructuring of the Conservative government will impact on the economic policy. Early indications suggest that there may be a loosening of the previous Chancellors' austerity plans, along with a renewed emphasis on delivery of major infrastructure projects and industrial strategy.

Sector Evolution

5.25 Given the long term nature of the regeneration proposals for Old Oak and Park Royal, it is necessary to be cognisant of other changes which will impact on the evolution of sectors (such as technology changes).

5.26 For industrial sectors, ongoing innovation in products and processes (eg automation) could mean that sectors such as manufacturing and transport and logistics are fundamentally different in the future than they are today. For office sectors, changes in working patterns and practices may impact upon the types of locations where firms want to invest, and the type of space they are looking for.

5.27 There is also a need to ensure that the local labour force has the skills required to take up in new employment opportunities in Old Oak and Park Royal. A number of the identified future opportunity sectors will require higher (different) skill levels than the current sector mix. To supply the market, there may be a need to train / re-train the local labour force to ensure that local people can take advantage of the opportunities developing in Old Oak and Park Royal.

5.28 In this context, it will be important for OPDC to monitorand understand the nature of these changes and their implications for the OPDC area.

Sector Growth Scenarios

5.29 Bearing in mind the above considerations, and based on the phasing of space to be delivered, we can draw the following conclusions regarding how each of the sectors might evolve in the period to 2041:

1) Manufacturing (particularly food) is likely to remain important over the plan period especially at Park Royal (2017-2037+)

2) Transport and logistics is also likely to remain important over the plan period (2017-2037+) given Park Royal's location and loss of industrial land elsewhere in London

3) While motor trades is not considered to be a key growth sector, demand is likely to continue in Park Royal over the first half of the plan period (2017-2027). However, this is a cost sensitive sector which has the potential to be affected by land use changes and value uplift. In the longer term, it is possible that the sector will experience fundamental changes related to the automation of vehicles; this will require monitoring over the next 10 years

4) Business support services are likely to continue to grow to support these industries at Old Oak and Park Royal (2017-2037+)

5) Creative and advanced manufacturing sectors are already located locally but might be expected to develop more strongly over the plan period (2017-2037+). The delivery of bespoke workspace (eg in an Industrial Business Park) and the activities of Imperial West are likely to be particularly important in the medium to longer term.

6) There are existing strengths in the ICT and creative services sector, however stronger cluster development is only likely in the longer term (2028-2037+) linked to the delivery of new office space and high quality environments and amenity.

7) It is considered that the professional services sector is a longer term (2028-2037+) opportunity since this will require new high quality office space and place making activities to create the 'sense of place' required to make this attractive to tenants.

8) The life sciences sector is seen as a medium to long term (2023-2037+) opportunity which will largely depend on what is happening elsewhere across London (eg the extent to which activity in Whitechapel and King's Cross saturate demand), along with the success of Imperial West and ability to deliver new and bespoke workspace (eg in an Industrial Business Park).

9) Low carbon – the Cleantech Cluster Feasibility study identifies a number of immediate / short term actions for OPDC and partners to stimulate the development of the low carbon sector locally. Despite this, given current sector development levels locally, the sector is seen as a medium to long term opportunity (2023-2037+), which can be supported to develop in line with the activities of Imperial West and in line with wider delivery of new development at Old Oak.

10) The potential scale of growth for each sector is considered in Table 5.2. The table compares a reference case scenario (based on past trends and London wide projections), to a policy on scenario which takes account of OPDC's proactive planning activities. Employment numbers in the policy-on scenario are indicative and intended for illustrative purposes only. They take into the account the current scale of each sector, wider sector growth projections, development expectations and other macro and micro economic considerations.

5.30 The analysis highlights that:

- Reflecting the type of space being delivered, the majority of growth can be expected from the office based digital, media and creative sectors, and business and professional services sectors.
- Growth in industrial sectors is likely to be much smaller in scale, reflecting constraints in Park Royal capacity. While in the short term this is likely to be based around existing strengths (eg food and transport and logistics), this could evolve towards other high value industrial sectors over the medium to longer term.

5.31 It should be noted that our work has focused attention on the identified opportunity sectors, which are all employment (B Use Class) sectors. There are numerous other sectors which could contribute growth in future years – not least retail, leisure and hospitality. These are considered separately in other evidence base documents.

5.32 How these scenarios might play out spatially, and in terms of evolution within each sector, is considered in the next chapter.

Table 5.3 Comparison of Growth Forecasts and Aspirations

	Current Sector Size (jobs)	Policy Off Scenarios		Policy On Scenario (taking into account OPDC proactive planning policies)		
		...based on past 5 years trends across London	...based on range of employment projections[60]	Wider Considerations	Indicative Scale of Future Change for OPDC[61]	Timescales for Growth
Food Manufacturing	4,400	+900	-1,300 to -1,600	Park Royal protected as SIL – this is likely to insulate demand	Potential for growth – 500 to 1,000 jobs	2017 to 2037+
Transport & Logistics	12,900	+900	-500 to -1,800	Park Royal protected as SIL – this is likely to insulate demand	Potential for growth – 500 to 2,000 jobs	2017 to 2037+
Motor Trades	1,700	-200	-200 to -300	Park Royal protected as SIL – this is likely to insulate demand	Stable or small decline	2017 to 2027
ICT, Media & Creative	6,700	+2,000	+1,300 to +2,500	HS2, Crossrail and scale of mixed use delivery planned; step change from current context	Greater than 10,000 jobs	2028 to 2037+
Business & Professional Services	9,200	+1,400	+1,500 to +2,900	HS2, Crossrail and scale of mixed use delivery planned: step change from current context	Greater than 10,000 jobs	2028 to 2037+
Creative Manufacturing	300	0	0 to -100	Park Royal protected as SIL; proximity to HEI	Up to 1,000 jobs	2017 to 2037+
Advanced Manufacturing	900	-200	-200 to -500	Park Royal protected as SIL; proximity to HEI	Up to 1,000 jobs	2017 to 2037+
Low Carbon	1,300	Forecasts not available		Proactive planning to develop clean-tech cluster; activities of Imperial; development of circular economy	Nascent sector; scale of potential growth unknown at this stage	2023 to 2037+
Life sciences	50	Forecasts not available		Activities of Imperial; wider development of sector across London	Nascent sector; scale of potential growth unknown at this stage	2023 to 2037+

Source: Regeneris Consulting, based on BRES, GLA and Cambridge Econometrics

[60] Based on both GLA and Cambridge Econometrics employment forecasts for London, applied to current OPDC employment. The minimum and maximum range is presented.

[61] Indicative figures taking into account current scale of sector, wider growth projections, development expectations and wider macro and micro economic considerations. Intended for illustrative purposes only.

6. Recommendations to Support Sector Development

6.1 This section sets out our recommendations based on the research undertaken. It considers where each sector might be located within Old Oak and Park Royal, how these sectors could evolve in the coming years, and the critical success factors which will help them to achieve their growth potential.

Principles to Support Sector Development

6.2 In supporting sector development and growth in the future, there are a number of overarching principles which should cut across OPDC's activities. These reflect emerging priorities set out within the draft Socio-Economic Regeneration Strategy and wider OPDC evidence base.

Enhancing Productivity and Value

6.3 Existing sectors, which may be seen as comparatively less valuable or productive today, will become more valuable as technology drives productivity and efficiency. Alongside this, with enhanced public transport access and large-scale regeneration, the OPDC area is ideally placed to support diversification into new sectors, with high value added to the London and UK economy. This should be seen as a positive evolution, helping the area to remain competitive within the London and wider economic contexts, and potentially delivering socio-economic benefits, including a greater mix of different job and training opportunities, for the local workforce and surrounding communities.

6.4 It is important that existing sector strengths and business are not left behind in this process: supporting innovation and technology adaptation within existing sectors can help to deliver improvements in productivity, competitiveness and value, in line with wider socio-economic growth aspirations.

Inclusive Growth

6.5 Linked to the above, and a key theme which has emerged via consultation, is the importance of ensuring socio-economic complementarity between new non-industrial uses at Old Oak and existing industrial activities at Park Royal.

6.6 There are a number of important considerations here, including ensuring that new development at Old Oak delivers an appropriate mix of uses which integrate in a cohesive way with existing uses, supporting the existing Park Royal business community to remain and thrive within the area, supporting the development of local supply chain linkages between existing and new businesses and places, and supporting local residents to access emerging economic opportunities in the area.

Sustainable Growth

6.7 Reflecting wider OPDC priorities, sustainability principles should be at the heart of future sector development and economic growth in the area. Aside from embedding sustainable construction and transport principles within new development, the development of the circular economy is a particular priority and a number of the growth sectors identified (including food manufacturing, transport and logistics and low carbon / clean) present opportunities in this respect. These

opportunities have the potential to be transformative in terms of the processes and behaviours of individual businesses, the overall environmental credentials of the area, and its profile externally.

The Importance of Flexibility

6.8 Given the long term nature of the regeneration plans for the OPDC area, it is important that the OPDC and its partners take a flexible approach to sector development and growth. As highlighted in the sector profiles, there is potential for significant evolution in the period to 2041 both in the sectors themselves, and in the way that they operate. This might range from innovation and technological advances, to changes in working patterns and practices.

6.9 A strong and up to date evidence base and a proactive relationship with businesses, sector bodies and wider strategic partners will be necessary to help the OPDC understand changes in demand and identify new opportunities as they emerge.

Recommendations

6.10 Based on the research undertaken, there are a number of recommendations to support sector and economic development in the Old Oak and Park Royal area in the future.

6.11 Cross cutting recommendations are provided in the tables overleaf, listed under 4 broad themes:

- Area 1: Sector Development
- Area 2: Workspace, Infrastructure and Placemaking
- Area 3: Skills and Social Inclusion
- Area 4: Evidence and Strategy.

6.12 Building upon these, recommendations are then provided for each sector, considering how these sectors might be supported to evolve and develop in the area in the coming years.

Cross Cutting Recommendations

Table 6.1 Area 1: Supporting Sector Development

Recommendation	Detail	Relevant Sectors
Set up sector specific networking opportunities and sub-groups	To develop specific sector strengths, it is important that there are opportunities for networking across key sectors. This can facilitate sharing of experiences as well as business development opportunities. In the short term, the focus should be on food manufacturing as well as transport and logistics but other groups may need to be established as and when the need arises (e.g. in opportunity sectors). For the emerging sectors (such as ICT and creative as well as professional services) sub-groups could be established to identify opportunities to support the growth of these sectors. This should include industry leaders as well as local stakeholders, workspace providers and businesses (such as existing creative workspaces and artists studios). Sub-groups would have a remit to provide: strategic messaging to relevant external partners; oversight of the development and delivery of workspace; and, engagement in the delivery of a skills and employment offer. These do not necessarily need to meet regularly but a small membership should be agreed for a group which can meet as required.	Existing sector strengths in the short term – particularly food manufacturing and transport and logistics
Explore the need for targeted business support	The OPDC should work with partners including the three Boroughs, West London Business, the GLA and the London LEP to ensure that the business support needs of businesses within key sectors are understood. As a starting point effective and ongoing dialogue with businesses would help to ensure that there is a good understanding of the needs of businesses as they arise. The Park Royal Business Group provides a strong interface for such dialogue. The type of support which is likely to be required will vary from sector to sector, but is likely to include: (a) access to micro-finance for smaller firms looking to grow; (b) support to bring goods to market including supply-chain development and commercialisation (c) help finding the right types of premises.	In the short term existing sector strengths and enterprise / SMEs should be prioritised. The longer term focus could be on enterprise SMEs in opportunity sectors (ICT, Creative, Business and professional and Science and Innovation based opportunity sectors)
Proactive marketing, messaging and inward investment activities	Despite the significant economic role that Park Royal plays in London, in the past there has been no coordinated / consistent attempt to articulate the strengths of the area to wider audiences. The OPDC should seek to work collaboratively with London and Partners and West London Business to undertake targeted national and global marketing of Old Oak and Park Royal. In the short term, this should focus on articulating and enhancing the competitive position of the areas existing sector strengths (eg food manufacturing).	Focusing on existing sector strengths in the short term. Longer term inward investment activities should look at opportunity sectors (ICT, Creative, Business and professional and Science

	Over the medium to long term and in line with wider development timescales, this could evolve to include inward investment activities to target and attract new businesses, sectors and investment in to the area. This could include the development of a marketing strategy for commercial space to help the area communicate its offer as a diverse and accessible economic node, and targeted action to attract high profile anchor tenants and inward investments. It is important that formal marketing activities are supported by consistent messaging across all partners. This could include regular partner briefings and networking events to provide updates and discuss ongoing approaches.	and Innovation based opportunity sectors)
Mitigating against rising land values in Park Royal	Further work will be needed by OPDC in the coming years to understand how Old Oak spill over effects on Park Royal land values will impact on the vitality and viability of Park Royal as an industrial location, and the measures which could be put in place to mitigate against this (eg options to deliver / protect workspace at levels which are affordable for SMEs and key sector specialisms). Learning from other industrial areas in close proximity to major transport hubs (such as Heathrow) can play a role in this, although in many ways, the OPDC context is unique in terms of the size of Park Royal and the scale of the transport enhancements and wider regeneration planned.	Park Royal Industrial sectors
Developing strong links with universities	For many of the key sectors identified for future growth, access to HEI or research assets is particularly importance. The development of a major new Imperial College research campus at White City, along the presence of numerous other research assets in close proximity provides a significant opportunity for the OPDC area. Establishing strong links with these research assets and ensuring that they become active partners will be important in helping to realise sector aspirations. Ensuring that HEI are core partners in future sector development activity is of key importance. Practical action might include working to drive research and innovation within OPDC businesses via new links to HEI, and the delivery of bespoke space (either incubator or grow on space), to support spin out from neighbouring research institutions.	Particularly important for opportunity sectors – ICT, Creative, Business and professional and Science and Innovation based opportunity sector

Table 6.2 Area 2: Workspace, Placemaking and Infrastructure

Theme	Detail	Relevant Sectors
Ensuring the supply of space remains diverse and suited to the needs of the market	In supporting the economic and sector aspirations set out in this report, it will be important that the supply of space across the OPDC area remain diverse and suited to the needs of businesses – this includes spaces of different typologies, sizes, and specifications. This should focus on businesses across the life cycle – including those starting up, those looking to grow and large / established employers. Key actions should include: • Ensuring that existing industrial employment space (and employment) is retained and re-provided within new development where compatible with land use policy • Working with London & Partners, local agents and developers to test and guide the short, medium and longer term demand for space – from smaller SME accommodation to larger floor plates and potential pre-let within the area. Market testing should be made as sector and occupier specific as possible and should be reviewed on an annual basis. This could play a key role in ensuring space and amenities ultimately developed meet the needs of businesses and the sectors that OPDC is trying to attract.	Cross-cutting across all sectors
Supporting the delivery of flexible and affordable workspace for SMEs	Our research suggests that a broad range of space is required to ensure the growth of key sectors. Affordable workspace for SMEs is likely to be particularly important in growing key sectors such as ICT, media and digital, business services, low carbon and med-tech. There are a range of workspace typologies which are likely to be relevant. These are summarised below. Workspace Typology and Relevant Sectors **Workspace Type** / **Relevant Sectors** Incubator, Accelerators and Co-Working Space: Food manufacturing; Creative manufacturing; ICT, Digital and Creative; Prof and Business Services Managed workspace: ICT, Digital and Creative; Prof and Business Services Serviced offices: ICT, Digital and Creative; Prof and Business Services Creative studios: ICT, Digital and Creative Services Maker spaces: Creative manufacturing; Advanced Manufacturing Temporary deskspace in existing office/studio: ICT, Digital and Creative; Prof and Business Services Bespoke space (eg lab, technical space): Food manufacturing; Advanced manufacturing; Low Carbon; Med tech In our experience, successful workspace should be delivered by the private sector, however a supportive strategic and regulatory environment is important to ensure that the private sector can respond to market needs. Actions by OPDC to guide the process might include:	Cross-cutting across all sectors

	• Develop of guidance / policies within the Local Plan to secure the delivery of flexible and affordable SME workspace across the OPDC area • Engage with developers and providers on workspace delivery, to ensure new provision is well planned and meets the requirements of the market. This should focus on the fit out and specification of space, and integration with the wider environment and economic context • Explore the potential to use Article 4 directions to protect SME workspace in the area from permitted development rights • Consider the range of potential interventions (rate deferral, community value lease models) to minimise the initial costs for small creative enterprises looking to locate in the area • As part of masterplanning activities, identify buildings and spaces which could be used for SME or creative uses – either as meanwhile uses during construction or permanent or 'long term temporary' spaces • Work with local partners such as HEI, landowners and developers to explore the potential to deliver shared space projects which can help support the development of local sector specialisms (e.g. food and drink research).	
Exploring and testing new models of working	There is a growing policy emphasis at both the London and national levels of securing economic intensification in industrial, town centre and other economic locations. At the same time, recent development across London has highlighted that businesses and sectors are willing to explore new models of working – partly in response to increasing costs in more traditional locations and workspaces. Old Oak and Park Royal present an excellent opportunity to explore and test workspace models in town centre, industrial edge and SIL locations – including employment typologies which are more flexible than has traditionally been the case in the types of businesses and sectors they accommodate.	Cross-cutting across all sectors
Place-making activities	It will be important that a 'sense of place' is developed at Old Oak in order to attract some of the key sectors which have been identified, particularly creative and professional business activities. Alongside employment uses, other uses such as retail, cafes/restaurants and community uses will be important in enhancing the attractiveness, usability and attractiveness of the area. A strong and attractive environment will also be integral. Placemaking principles and interventions will be defined via OPDC masterplanning activities and will be specific to OPDCs diverse set of places and locations. However, an important consideration will be engaging with landowners and developers to ensure they are aware of the economic and sector aspirations set out in this report and working with them to ensure that new developments meet the needs and expectations of existing and new sectors and businesses. Considerations include the types of space provided in different locations, the internal and external specification of the space provided (e.g. fit out, servicing, floor-ceiling heights, servicing etc), and the integration of the space with the wider area (e.g. public realm and proximity to ancillary services and infrastructure).	Particularly important for opportunity sectors – ICT, Creative, Business and professional and Science and Innovation based opportunity sectors

	– any other factors highlighted as important in case studies) of their employment space will make it attractive to occupiers.	
Ensuring access to fast and efficient broadband	Research has identified that broadband provision is currently poor across the OPDC area. To attract firms within certain sectors such as ICT and digital and business and professional services, it is essential that broadband provision is improved. At the broadest level, there are two options: (a) work with partners to ensure delivery of higher speed and/or good connection to broadband across the whole the area (e.g. Hyperoptic, City Fibre Holdings) (b) ensure that developers deliver high speed broadband within individual developments in OPDC. Enhancements to broadband are being examined elsewhere within the OPDC evidence base.	All sectors; albeit particularly important for identified ICT, Creative, Business and professional and Science and Innovation based opportunity sectors
Coordinated working to address congestion	Alongside digital infrastructure, congestion on the road network has been identified as the biggest single constraint on the performance of Park Royal. This is particularly the case for industrial activities such as food manufacturing and transport and logistics which rely on receiving goods and then getting products out to market. Action to address congestion in the local area as part of wider OPDC masterplanning activities should therefore be considered an important priority in helping to improve the efficiency and productivity of business activities, in helping to enhance the competitive position of Park Royal overall, and in delivering air quality and overall environmental improvements. Given the impact of Park Royal on both the local and strategic road networks, close partnership working with the Boroughs, West London Alliance and TfL will be required. Partnership working with local businesses and local landowners and developers might also play a role in adapting day to day behaviours and working practices.	Industrial sectors – particularly transport and logistics, and food manufacturing
Maximising transport and accessibility to and within the OPDC area	Strong public transport accessibility is a key need for many of the opportunity sectors identified – particularly those creative, professional and science based sectors identified as future opportunities. The arrival of Crossrail and HS2 and new London Overground stations will transform accessibility to the area from across London and the UK, and is one of the key factors which will help Old Oak to develop as a new employment hub. It is integral that the benefit from this is maximised, and that new office and commercial space is configured with accessibility in mind – both to and within the area. Future masterplanning activities can play a key role in providing the framework and principles to guide this.	All sectors; albeit particularly important for ICT, Creative, Business and Professional and Science and Innovation based opportunity sectors

Table 6.3 Area 3: Skills and Social Inclusion

Theme	Detail	Relevant Sectors
Links with education providers and business to support skills development	Access to the right staff and skills is essential to the evolution of Old Oak and Park Royal – both in terms of attracting businesses across a range of sectors, particularly those with higher skills requirements, but also in terms of helping to ensure that growth is delivered in an inclusive way which delivers benefits for existing communities. In some respects, access to skills is not a core challenge for the OPDC area, given its position within the London and south east labour markets, and given future transport improvements which will open this up further. That said, given the sector specific approach being taken by OPDC, there would be benefit in developing close partnership working with relevant FE and HE providers and also with local businesses. This should focus on ensuring that economic aspirations for the area are articulated and understood, future skills needs mapped, and a collaborative approach is developed to match skills provision to local sector development as it evolves. The OPDC Socio-Economic Baseline provides an existing evidence base on current skills performance of the local area; further work will be needed to map this (and skills gaps) as demand attached to specific sectors develops. Specific approaches to developing skills, training and employment opportunities for local residents should be developed as part of the OPDC Socio-Economic Regeneration Strategy.	Particularly important for opportunity sectors – ICT, Creative, Business and professional and Science and Innovation based opportunity sectors

Table 6.4 Area 4: Strategy and Policy

Theme	Detail	Relevant Sectors
Ongoing monitoring and review to understand performance and opportunities	Given the long term nature of proposals for the OPDC area, ongoing monitoring will be important to help understand performance, track change and identify emerging opportunities and challenges. The evidence provided in this report provides a strong basis for this. OPDC should seek to review data on the business base on a regular basis, cross referencing this with other relevant statistics to maintain an understanding of the factors which support growth. Ongoing dialogue with businesses is also important particularly within identified opportunity sectors. OPDC should also ensure that the findings of wider GLA workstreams are used to update and inform sector and economic policy. In the first instance this will mean taking stock of the emerging GLA Industrial Land Demand Study. This is likely to draw very relevant conclusions on the demand for and release of industrial land across London, and hence will have important implications for Park Royal SIL and current industrial uses.	Cross-cutting all sectors

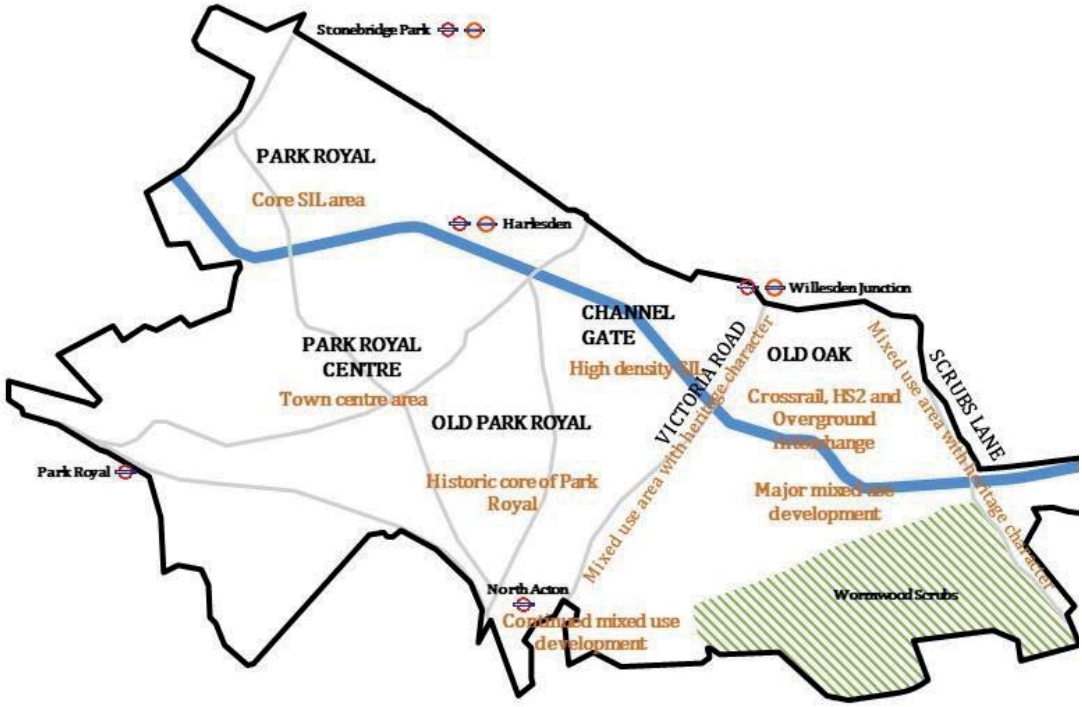
Sector Specific Recommendations

6.13 Based on the detailed research undertaken, conclusions have been developed on how the key sectors could evolve in the area in future years, and how they might be supported to do this.

6.14 Spatial recommendations are intended for illustrative purposes to broadly highlight the types of location which each sector is likely to be most suited to. This draws on a range of considerations including the current characteristics of Old Oak and Park Royal, future development potential and phasing, local amenities and infrastructure and the specific needs of each sector.

6.15 For illustrative purposes, spatial recommendations are made with reference to a number of character areas within the OPDC area; these are introduced in the map below.

Figure 6.1 Old Oak and Park Royal – Character Areas

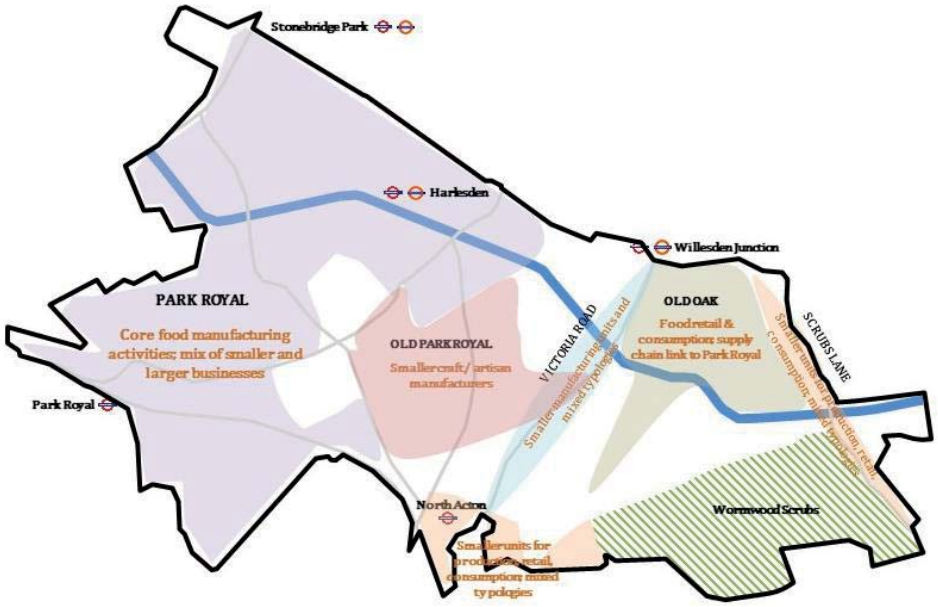


Source: Regeneris Consulting

Food Manufacturing

Spatial Recommendations

- Larger food manufacturing activities – Park Royal is likely to remain the core location for larger more traditional manufacturing activities. These uses are largely suited to industrial locations, away from residential locations
- Artisan food manufacturing – Park Royal, industrial edge and, where mixed activities are taking place (production / retail / consumption etc), town centre / mixed use development locations
- Related food industries projects – potential for meanwhile uses throughout the area, particularly Old Oak development sites.



Note: This map is illustrative only and does not denote precise boundaries or constitute land use policy.

Sector Development Recommendations

- Food sector group – explore the potential to set up a sub group to allow networking within the sector, to lobby on behalf of the sector and explore options for future sector development
- Marketing and promotion– work with partners to better communicate the strength of the local food sector to external markets and to promote consistent messages regarding opportunities. This could include open days, events and markets, to publicise and sell local produce
- Supply chain development – via the sub group explore how supply chain linkages can be developed between the existing food manufacturing sector and emerging economic opportunities in the Old Oak area
- Business support – work with the GLA, Borough and wider partners to map business support needs of small food businesses and work to fill gaps – either via signposting or bespoke provision linked to workspaces
- Research and innovation – via the food sector group explore how the sector locally can be encouraged to develop research and innovation strengths – eg via cross business collaboration, developing links to HEI, or through the provision of an innovation / research facility (taking into account the previous Food Innovation Centre).
- Support sector evolution – via the food sector group and via OPDC's wider masterplans and economic strategy, support the evolution of the food sector within the area, including working with businesses to embed Circular Economy principles and to establish the food sector within new places and developments.

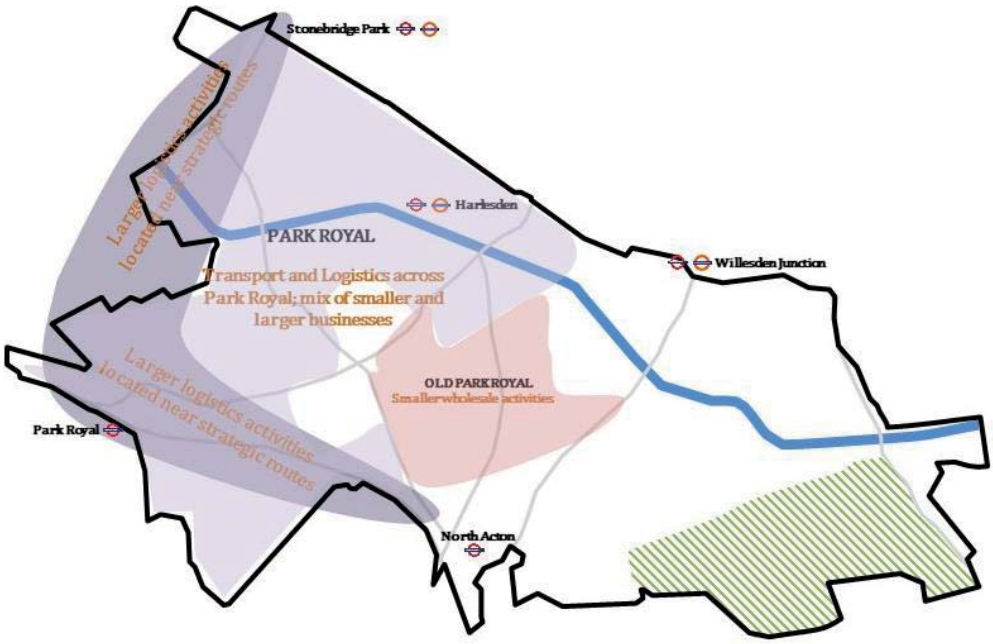
Wider Enabling Recommendations

- Test commercial property needs of the sector – work with businesses, local agents and developers to test the short, medium and long term demand for space across the OPDC area, and ensure that space meets the needs of businesses (eg need for loading and parking space for some businesses)
- Support the delivery of flexible workspace for SMEs – ensuring supply of workspace meets needs of small businesses. This is likely to include small flexible units suitable for food production, along with flexible shared workspace premises / facilities (eg kitchens) for start-up businesses
- Supporting infrastructure – as part of masterplanning activities and delivery activities, work to address wider infrastructure constraints which impact on the sector – including congestion within Park Royal and ensuring access to fast and reliable broadband.

Transport and Logistics

Spatial Recommendations

- Sector likely to continue to be focused within Park Royal. These uses are largely suited to industrial locations, away from residential locations.
- Some potential for spatial differentiation within sector – businesses serving strategic needs will require closest access to road networks (and potentially rail heads and water in the future). Smaller wholesale activities more likely to be located in Old Park Royal and on industrial edge.



Note: This map is illustrative only and does not denote precise boundaries or constitute land use policy.

Sector Development Recommendations

- Transport and logistics sector group – explore the potential to set up a food sector sub group to allow networking within the sector, to lobby on behalf of the sector and explore options for future sector development
- Marketing – work with partners to better communicate the strength of the Park Royal transport and logistics sector to external markets and to promote consistent messages regarding future plans and opportunities
- Business support – work with the GLA, Borough and wider partners to map food sector business support needs and fill gaps – either via signposting or bespoke provision linked to workspaces
- Sector evolution and innovation – via the sector group and via OPDC's wider masterplans and economic strategy, explore the potential to better use rail and water assets in the area, and the potential to develop smarter, more intelligent approaches to sharing vehicle capacity and embedding Circular Economy principles within the sector.

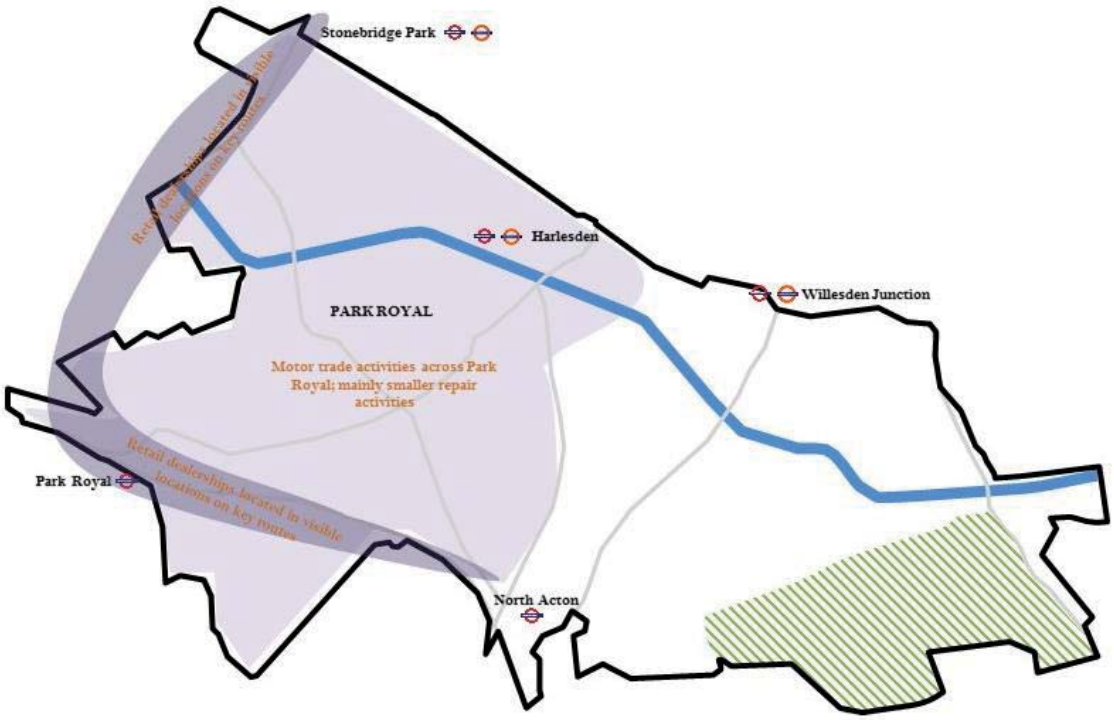
Wider Enabling Recommendations

- Testing commercial property needs of the sector – work with local businesses, agents and developers to test the short, medium and long term demand for space across the OPDC area, and ensuring that space meets the needs of businesses. This includes the testing of new mixed and / or multi-storey typologies which support aspirations for intensification
- Supporting infrastructure – as part of masterplanning activities and delivery activities, work to address wider infrastructure constraints which impact on the sector – including congestion within Park Royal and ensuring access to next generation and reliable broadband.

Motor Trades

Spatial Recommendations

- Once Car Giant has left its current Old Oak location, the sector is likely to be focused in Park Royal.



Note: This map is illustrative only and does not denote precise boundaries or constitute land use policy.

Sector Development Recommendations

- Long term sector evolution – further work to understand the development of automated vehicles and how these will impact on personal travel. This might involve engaging with Future Cities and potential providers such as Google and Uber to understand likely future models for car storage and maintenance, with ongoing review of the sector over the medium and long term to identify potential opportunities as they emerge.

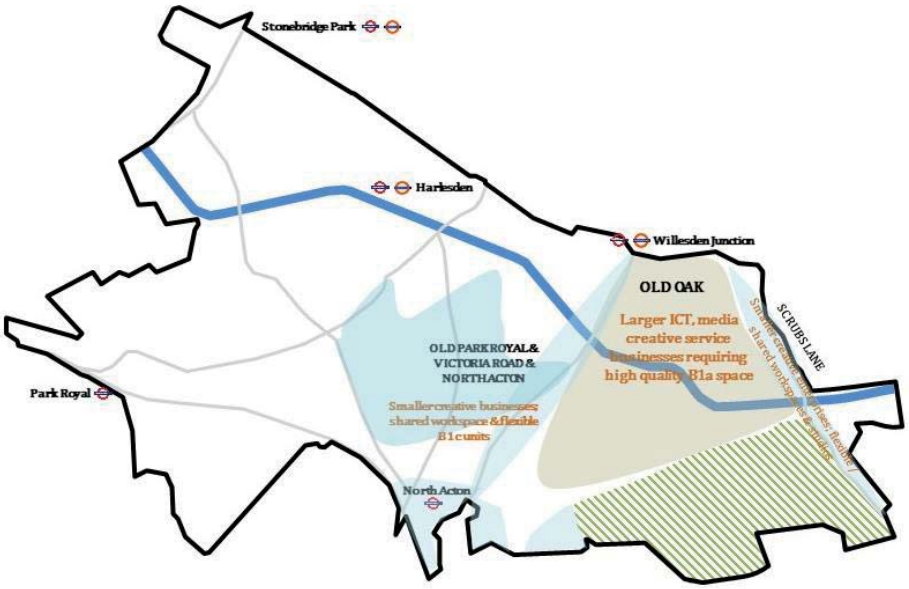
Wider Enabling Recommendations

- Protection of space for motor vehicle trades – in the context of space pressures for motor trades in other locations, ensure that Park Royal continues to provide space to accommodate traditional vehicle repair activities.

ICT, Media and Creative Services

Spatial Recommendations

- This sector is relatively flexible in its locational requirements, and in theory can be located in town centre / mixed use development locations or industrial edge areas.
- The larger footplate office end of the sector most likely to be focused around Old Oak Common (and to a lesser extent North Acton) given delivery of new space and access to strong transport and amenity.
- More locally, locations such as Scrubs Lane, Victoria Lane and Old Park Royal are likely to be particularly attractive locations for smaller creative businesses reflecting the nature of the environment.



Note: This map is illustrative only and does not denote precise boundaries or constitute land use policy.

Sector Development Recommendations

- Creative sector sub group – a sub-group could be established to identify opportunities to support the growth of this sector. This should include industry leaders as well as wider sector stakeholders (eg linking into west London creative sector networks) with a remit to provide: strategic messaging to relevant external partners; oversight of the development and delivery of workspace; and, engagement in the delivery of a skills and employment offer. These do not necessarily need to meet regularly but a small membership should be agreed for a group which can meet as required.
- Marketing and inward investment – over the medium to long term and in line with wider development timescales, inward investment activities to target and attract new businesses, sectors and investment in to the area. In the short to medium term, the focus should be on exploring the sector in more detail and working within regional partners to explore whether there is a specific creative sub-sector or niche which OPDC should be focusing on. In the longer term, the development of a marketing strategy for commercial space to help the area communicate its offer as a high value, diverse and accessible economic node. This might include specific work to attract high profile anchor tenants to the area – this could be a HQ function of a global creative firm, or a creative HEI facility (St Martin's at King's Cross is a successful example of the role HEIs can play in supporting wider placemaking aspirations).
- Business support – work with the GLA, Borough and wider partners to map the business support needs of small creative businesses and work to fill gaps – either via signposting or bespoke provision linked to workspaces.

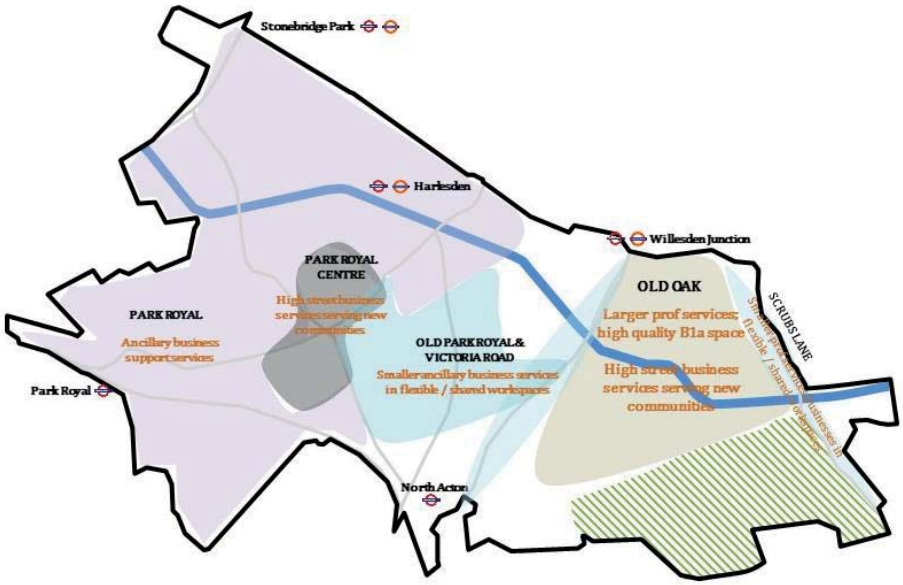
Wider Enabling Recommendations

- Test the commercial property needs of the sector – work with agents, developers and strategic partners (eg L&P) to test the short, medium and long term demand for space across the OPDC area, and ensure that space meets the needs of businesses
- Support the delivery of flexible workspace for SMEs – ensure supply of workspace meets the evolving needs of small creative businesses. This is likely to include a mix of shared and flexible SME workspace, and small flexible units which can be used for a variety of purposes
- Placemaking, amenity and infrastructure – as part of masterplanning activities, and drawing on the successful example of King Cross, focus on creating a strong sense of place and identity for Old Oak's new and emerging places. This means ensuring the delivery of high quality physical environments and buildings, developing a regionally competitive amenity offer (retail and food and drink offer) and first class infrastructure (particularly broadband). Successfully incorporating a mix of different uses will be important in this.

Business and Professional Services

Spatial Recommendations

- Professional and financial services – most likely to be focused around Old Oak Common (and to a lesser extent North Acton) given delivery of new space and access to transport and amenity
- High street professional services – most likely to be co-located with other retail and leisure uses at Old Oak and Park Royal Centre
- Business support services – more flexible, and will be located across the whole of the area.



Note: This map is illustrative only and does not denote precise boundaries or constitute land use policy.

Sector Development Recommendations

- Business and professional services sub group – a sub-group could be established to identify opportunities to support the growth of this sector. This should include industry leaders as well as stakeholders with a remit to provide: strategic messaging to relevant external partners; oversight of the development and delivery of workspace; and, engagement in the delivery of a skills and employment offer.
- Supply chain development – via the sub group explore how supply chain linkages can be developed between the existing business support service sector and emerging economic opportunities
- Marketing and inward investment – marketing and inward investment activities will be critically important to attract professional service activities to the area. The area will be competing on a global scale for these businesses so strong and coherent messaging about the specific offer of the area will be critical. Again, this might include specific work to attract high profile anchor tenants to the area – this could be an HQ function of a global professional or financial services firm.
- Business support – work with the GLA, Borough and wider partners to map business support needs of small businesses and work to fill gaps – either via signposting or bespoke provision linked to workspaces.

Wider Enabling Recommendations

- Test commercial property needs of the sector – work with agents, developers and strategic partners (eg L&P) to test the short, medium and long term demand for space across the OPDC area, and ensure that space meets the needs of businesses.

- Support the delivery of flexible workspace for SMEs – ensure supply of workspace meets evolving needs of small businesses. This is likely to include a mix of shared and flexible SME workspace, and small flexible units which can be used for a variety of purposes
- Placemaking, amenity and infrastructure – as part of masterplanning activities, focus on creating a strong sense of place and identity for Old Oak's new and emerging places. This means ensuring the delivery of high quality physical environments and buildings (eg landmark architecture), developing a regionally competitive amenity offer (retail and food and drink offer) and first class infrastructure (particularly broadband).

Advanced Manufacturing

Spatial Recommendations

- More suited to industrial locations throughout Park Royal. The proposed Industrial Business Park on the Channel Gate site would be an ideal location given the potential to deliver bespoke new workspace in a high quality environment.



Note: This map is illustrative only and does not denote precise boundaries or constitute land use policy.

Sector Development Recommendations

- Advanced manufacturing group – explore the potential to set up a sector sub group to allow networking within the sector, to lobby on behalf of the sector and explore options for future sector development. Local HEI (Imperial and Brunel) should take a lead role in such a group, given their existing activities in the sector in west London (Imperial West and Central Research Laboratory). This may link to a low carbon and or life science group give the links between the sectors.
- Business support – work with the GLA, Borough and wider partners to map business support needs of small advanced manufacturing businesses and work to fill gaps – either via signposting or bespoke provision linked to workspaces
- Research and innovation – via the sector group explore how the sector locally can be encouraged to develop research and innovation strengths – eg via cross business collaboration, developing links to HEI, or through the provision of an innovation / research facility.
- Sector evolution – via the sector group and via OPDC's wider masterplans and economic strategy, support the evolution of the sector within the area, focusing on opportunities to support the development of the clean tech cluster.

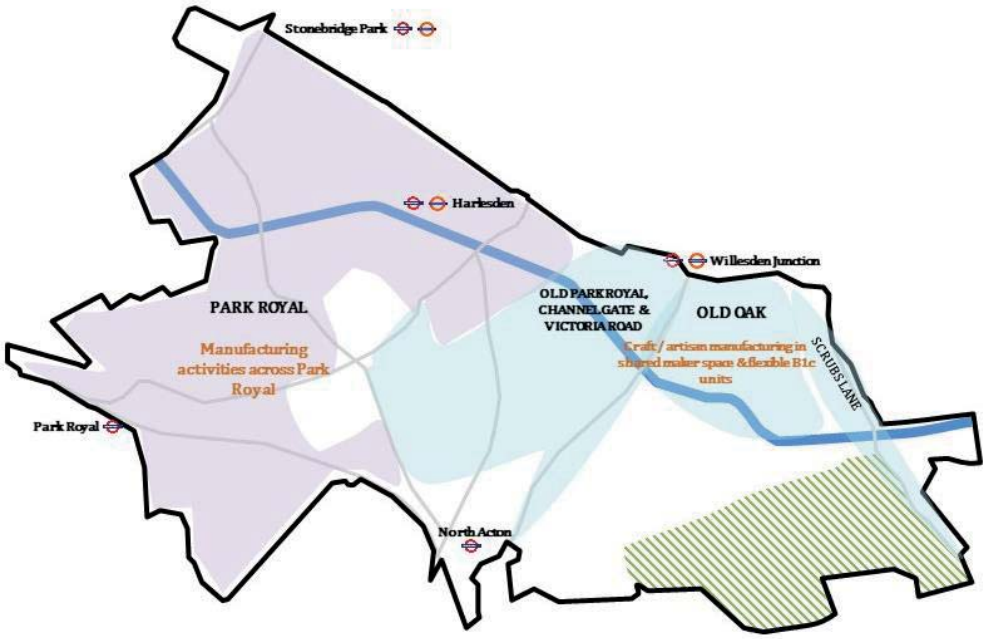
Wider Enabling Recommendations

- Test commercial property needs of the sector – work with businesses, local agents and developers to test the short, medium and long term demand for space across the OPDC area, and ensure that space meets the needs of businesses. In the longer term this should focus on demand for bespoke space in the proposed Industrial Business Park.
- Explore the demand for bespoke space to support SMEs – explore the potential to deliver a bespoke workspace facility to support innovation and enterprise in the sector, potentially linked to existing facilities at Imperial West and Brunel (Central Research Laboratory). Again, the proposed industrial Business Park might be the best location for this, but mixed use locations in Old Oak might also be appropriate.
- Supporting infrastructure – as part of masterplanning activities and delivery activities, work to deliver the access to fast and reliable broadband.

Creative Manufacturing

Spatial Recommendations

- More suited to industrial locations throughout Park Royal.
- Also potential for creative manufacturing activities in Old Oak North (building on existing creative manufacturing businesses locally), and Channel Gate on sites adjacent to rail infrastructure
- Smaller scale / craft activities also potentially suited to locations such as Scrubs Lane.



Note: This map is illustrative only and does not denote precise boundaries or constitute land use policy.

Sector Development Recommendations

- Business support – work with the GLA, the three boroughs and wider partners to map business support needs of small creative manufacturing businesses and work to fill gaps – either via signposting or bespoke provision linked to workspaces.
- Supply chain development – explore how supply chain linkages can be developed between the creative making sector and emerging economic opportunities in the Old Oak area (eg opportunities to supply new retail and or leisure uses in the area)

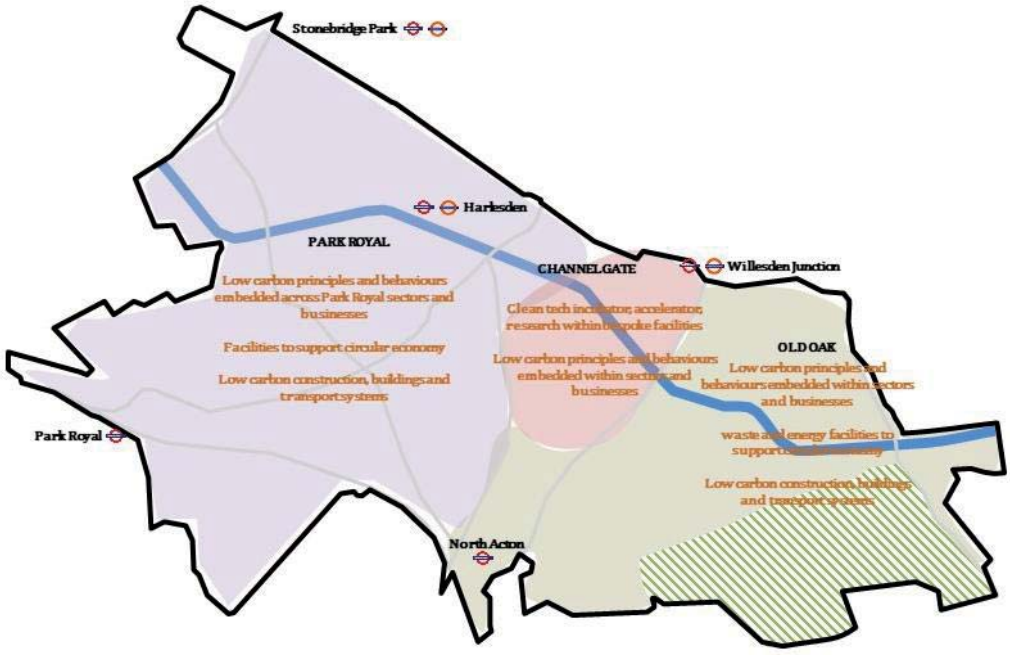
Wider Enabling Recommendations

- Delivery of flexible workspace for SMEs – ensuring supply of workspace meets the evolving needs of small businesses. This is likely to include small flexible units suitable for manufacturing, along with flexible shared maker spaces for start-up businesses
- Supporting infrastructure – as part of masterplanning activities and delivery activities, work to deliver the access to fast and reliable broadband across Park Royal.

Low Carbon

Spatial Recommendations

- Low carbon activities cut across many sectors and so in theory could locate across the whole OPDC area
- That said, many low carbon activities are industrial in nature and will be most suited to locations throughout Park Royal. The proposed Industrial Business Park on the Channel Gate site would be an ideal location given the potential to deliver bespoke new workspace in a high quality environment.



Note: This map is illustrative only and does not denote precise boundaries or constitute land use policy.

Recommendations

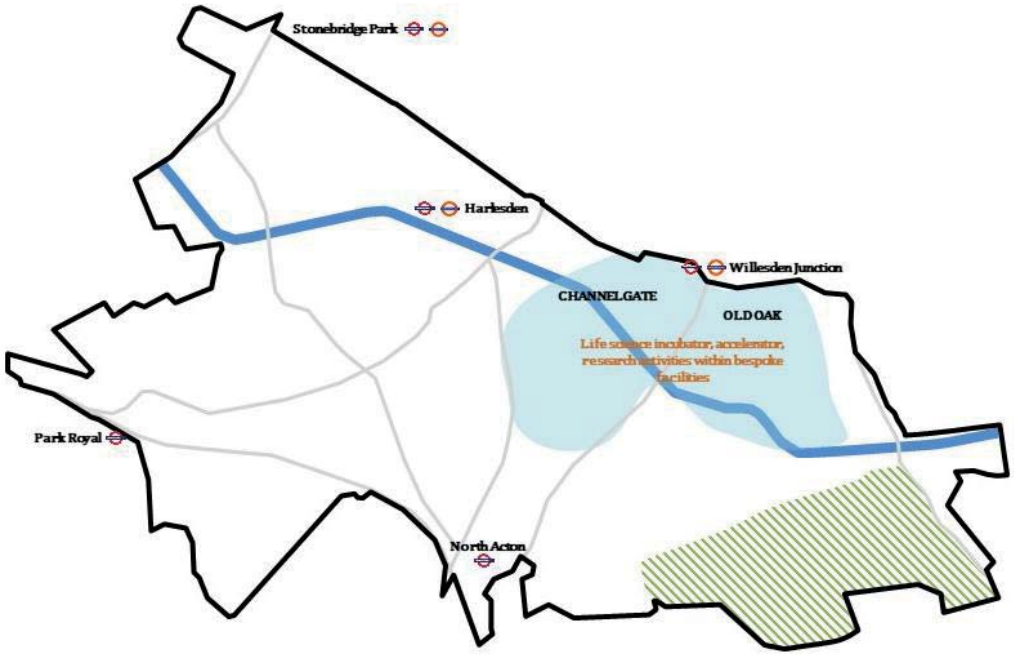
Recommendations for the development of the low carbon sector are set out within the OPDC Cleantech Cluster Feasibility Study. These include:

- Developing a clearer definition of the Cleantech sector, the activities it encompasses, and the areas of focus for OPDC
- Developing a Cleantech focused Innovation and Incubation Centre with clear links to Imperial College and the Climate Kic Accelerator
- Developing Cleantech UK as a national cluster organisation headquartered within the Innovation and Incubation Centre at Old Oak and Park Royal
- Mapping the cleantech business and research community across London
- Developing and delivering a circular economy business support programme.

Life Sciences

Spatial Recommendations

- The sector is likely to be located in areas with strong infrastructure and amenities, and in close proximity to research institutions. The proposed Industrial Business Park on the Channel Gate site would be an ideal location given the potential to deliver bespoke new workspace in a high quality environment. Old Oak might also be a suitable location.



Note: This map is illustrative only and does not denote precise boundaries or constitute land use policy.

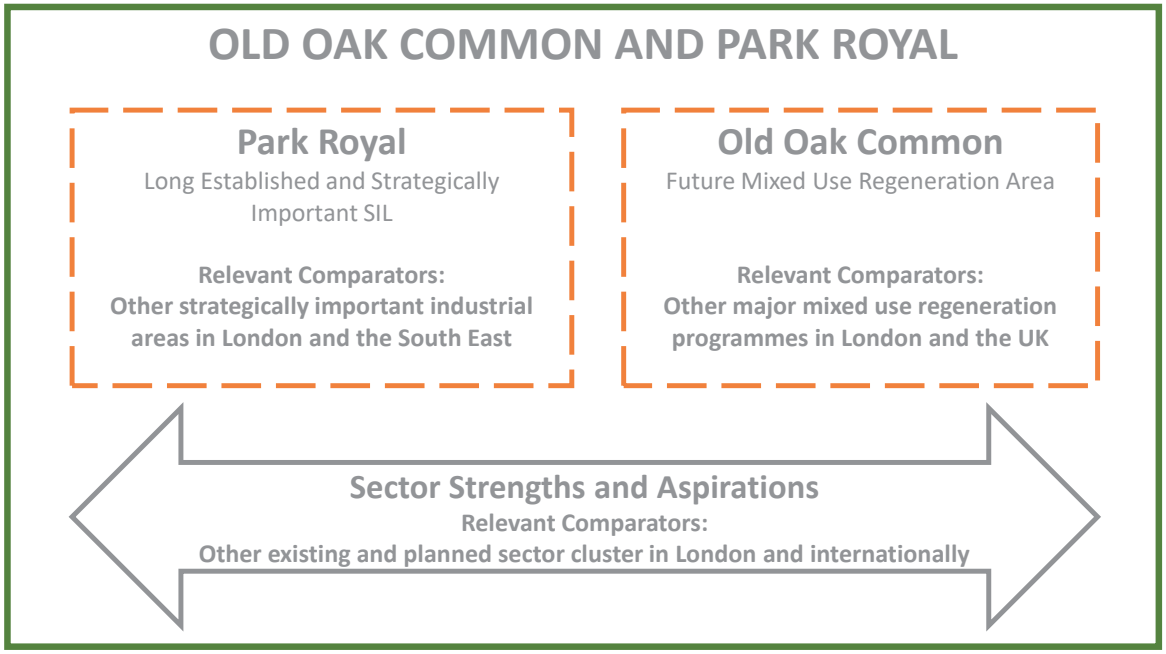
Recommendations

- Given the longer term and uncertain nature of the opportunity, the initial focus should be on engaging with key partners involved in the London Life Sciences sector – particularly the GLA and Imperial College. Focus should be on further exploring likely future demand for additional facilities and space to support the development of the sector in London (given existing activity in Whitechapel and St Pancras), the potential suitability of Old Oak for such activities and the types of space which might be required.

Appendix A - Learning from Elsewhere

A.1 In considering the potential for future growth in the OPDC area it is important to consider competition from elsewhere.

A.2 Given the varying economic characteristics of the OPDC area, there are a number of types of comparators areas of relevance. These are introduced in the diagram below and then explored over subsequent pages.



Industrial Area Comparators

Trafford Park, Manchester	
Size (ha)	785
Mix of uses/floorspace	Average size of units within the industrial estate is 18,460 sqft (larger than comparators). The park has a diverse mix of units in Trafford Park, including retail (13% of land area) and office space linked to Media City UK.
No of businesses/jobs	Jobs: 40,200 Businesses: 1,600
Spatial employment typologies	Trafford Park employs around 40,1000 people across a variety of sectors. Employment density is relatively low at 51 employees per hectare, demonstrating less intensive use of space.
Price sqft/m	Office: £17 Industrial/distribution: £4
Business rates (£m)	£70
Sector assets	Agriculture & Mining (5.50) Advanced Manufacturing (4.11) Other Creative (2.5)
Amenities	Good facilities for businesses and employees, including six hotels, three gyms, three conference facilities (including EventCity, the second largest exhibition space outside London) and one nursery. Facilities are mostly located at the extremities of the site.
Access to infrastructure/markets	Average size market, with 123,000 businesses whom employ 1.4 million people within 25km. In addition, there are 4.9 million working age people within a commutable distance by car. Overall connectivity is very good, within the immediate vicinity of J9 and J10 of the M60. Trafford Park also has good access to airports and is located 16 mins from Manchester Airport and 50 mins from Liverpool John Lennon Airport.
Other support available	No business support provision on site
Future growth potential	Developments around MediaCity UK and Trafford Park is leading to pressure on industrial land. Increasing amount of industrial to residential/office conversions.
Implications	Lower density makes Trafford Park feel more open and more attractive to businesses. Good access to employees with Level 1, 2 and apprenticeship qualifications, matched by the type of businesses on site. Access to Trafford Park by the labour force is achieved through good road access, with relatively low levels of congestions and good access to the local motorway. Better range of amenities at Trafford Park compared to Park Royal.

Slough Trading Estate, Slough	
Size (ha)	143
Mix of uses/floorspace	A large proportion of the site (22% of land area) is classified as a business park site type, reflecting the high number of multi-national headquarters located in the estate.
No of businesses/jobs	Jobs: 19,000 Businesses: 900
Spatial employment typologies	One in five jobs at Slough Trading Estate are in ICT and creative media, with a large number of international tech firms locating their headquarters in Slough. Employment density for the site is 133 employees per hectare, reflecting the high level of office-based employment.
Price sqft/m	Office: £21 Industrial/distribution: £12
Business rates (£m)	£73
Sector assets	ICT & Creative Media (5.40) Advanced Manufacturing (2.30) Manufacturing (2.23)
Amenities	There are four gyms and two nurseries on site, and a number of other facilities located in close proximity including two hotels, a conference centre and three nurseries.
Access to infrastructure/markets	Slough Trading Estate is very accessible, with 4.4 million working age people living within a commutable driving distance. Over a third of these people have a level 4 qualification, which helps one of Slough's key sectors (ICT and Creative Media). The estate has limited access by public transport, with bus connections required to access the train station. Slough does have very good access to the strategic road network, being located within 2 miles of J6 and J7 of M4 and only a 15-minute drive to Heathrow Airport.
Other support available	The estate is solely owned by SEGRO, who undertake whole estate branding, provide sustainable transport and offer training to businesses in the park
Future growth potential	SEGRO spending £110m in next 4 years to upgrade infrastructure. Will benefit from Crossrail when open
Implications	Slough has good access to highly skilled labour which corresponds to sector strengths on site. Park Royal also has highly skilled workers in close proximity, suggesting potential to create high value employment opportunities. Centralised management of estate has enabled coordination and implementation of investment in buildings, public realm and transport infrastructure.

London Riverside BID, London	
Size (ha)	309
Mix of uses/floorspace	Large proportion of the site is comprised of old fashioned logistics facilities and open storage. There are some new buildings on site, including a new distribution centre built by Tesco in 2013. A high proportion of the area is open industrial land (58% of land area), with most attributable to a landfill site. 26 units are currently vacant, totalling 271,633 sqft.
No of businesses/jobs	Jobs: 12,900 Businesses: 600
Spatial employment typologies	Employment density is low with around 27 employees per hectare. Units in London Riverside are very large, with an average site area of 43,100 sqft (6 times more than the average in Park Royal).
Price sqft/m	Office: N/A Industrial/distribution: £7
Business rates (£m)	£31
Sector assets	Utilities (6.05) Transport & Logistics (4.69) Manufacturing (2.23)
Amenities	Relatively poor facilities available on site, with one nursery, one gym and one conference centre.
Access to infrastructure/markets	Access to a large market with 308,290 businesses whom employ 3.3 million people within a 25km radius. There are 4.3 million working age people within commutable distance by car. The site is connected by the A13 to the M25, providing a dual-carriageway connection to Central London. London City Airport is a 20-minute drive and Stansted Airport a 45-minute drive. Rainham station is the nearest railway station, with routes via Barking to Fenchurch Street Station. Overall PTAL however is classified as very poor.
Other support available	No support is available to businesses with the exception of schemes provided by the CEME.
Future growth potential	Limited development potential at present. Presence of CEME on site may help generate new businesses/interest in sites.
Implications	The BID has had success in reducing recorded crime and helping to improve coordination with the local council. Lower cost of housing in surrounding areas compared to more central London locations makes it easier for businesses to recruit local employees at the lower end of the pay scale.

Manor Royal, Gatwick	
Size (ha)	181
Mix of uses/floorspace	Around a third of the site is warehouse space (37%), 13% is office space and 11% is factories. Manor Royal has the highest proportion of vacant land (10% of land area) when looked at against comparators. Currently has 78 vacant units totalling 876,956 sqft.
No of businesses/jobs	Jobs: 29,000 Businesses: 1,500
Spatial employment typologies	Employment density on site is 160 employees per hectare. This is around 80% more dense than Park Royal at present.
Price sqft/m	Office: £14 Industrial/distribution: £8
Business rates (£m)	£57
Sector assets	Public Sector (3.36) Utilities (3.07) Advanced Manufacturing (2.70)
Amenities	There are two hotels on site, with a number of others within close proximity largely to serve Gatwick Airport. In addition, there are two gyms on site, but no childcare or conference facilities available.
Access to infrastructure/markets	53,975 businesses within 25km of the estate, employing 440,000 people. Comparatively small labour force within commutable distance by car (2.7 million working age people). Average transport connections to the strategic road network, with a key motorway connection for Manor Royal (M23). Gatwick Airport can be reached within 10 minutes by car and Heathrow Airport is typically a 45-minute drive away.
Other support available	No business support schemes provided on site.
Future growth potential	Little space available given physical restrictions of Gatwick Airport and Crawley. Development plans in part depend on airport expansion.
Implications	Lack of SME workspace which impacts on the diversity of businesses and enterprise. Crime issues have been partly addressed by the BID through the Business Watch scheme and introduction of CCTV/ANPR.

North East Enfield / Upper Lee Valley	
Size (ha)	309
Mix of uses/floorspace	Area consists of five industrial sites. Standalone warehouse space is the most predominant land use (54% of the total area) and a further 15% is industrial and 11% bespoke industrial or utilities space. The average unit size is 10,500 sqft. Currently there are 26 vacant units totalling 1,029,178 sqft.
No of businesses/jobs	Jobs: 200 Businesses: 625
Spatial employment typologies	Employment density for the sites is relatively low, with 77 employees per hectare
Price sqft/m	Office: £13 Industrial/distribution: £9
Business rates (£m)	£52
Sector assets	Manufacturing (3.08) Construction (2.11) Transport & Logistics (2.06)
Amenities	Facilities are relatively poor, with one gym located in Brimsdown and one hotel located in Innova Park. There are no nurseries or conference facilities available at any of the sites.
Access to infrastructure/markets	Accessible to 4 million working age people within a commutable distance by car. Primary access routes are the A10 and A1055 (joining the North Circular to the M25). However, traffic congestion is a major issue for the estate especially on the junction with the M25. Stansted Airport is a 31 min drive from the centre of the site, and the nearest harbours are Tilbury and Felixstowe. (42 min and 1hr 30 min drive respectively). The area is served by national rail connections into Liverpool Street Station via Tottenham Hale. Despite this the PTAL rating for the site is deemed as very poor.
Other support available	No business support schemes provided on site.
Future growth potential	The re-development of land at Meridian Water to the south of North East Enfield is likely to play a significant role in providing extra housing and infrastructure for the local area. The area is also set to benefit from Crossrail 2, which is likely to pass through the area towards Tottenham Hale station, although this may not happen until the 2030s.
Implications	North East Enfield is likely to be a competitor for Transport and Logistics sector and for the location of distribution depots of growing firms looking to seek good access to Central London.

Existing and Emerging Sector Clusters / Comparators

Food Manufacturing

Dephna Group Workspace - Park Royal	
Sector	Food
Size	10 sites in total
Mix of uses/floorspace	The breakdown for overall individual rentable units is: 200 kitchens; 200 cold rooms; 200 storage units; 200 offices (250 sqft). Each building has a mix of uses, although generally each building has an even mix of kitchens, cold room/storage units, and offices. These tend to be designated and split by floor. There are a range of individual units, including: **Commercial kitchens** ranging from 400 sqft to 4,000 sqft; **Walk-in cold rooms** have a fixed size (L:3m, W,3m, H2m); **Storage unit** sizes range from 25 sqft to 10,000 sqft.
No of businesses/jobs	Buildings have multiple businesses utilising individual units. On average each business will use two individual units (i.e. one kitchen and one cold room). Based on this there will be approximately 400 businesses using the facilities.
Spatial employment typologies	Fully serviced modular offices which have been newly refurbished. Flexible units allow for a wide range of sizes for small to large businesses.
Price sqft/m	Range of prices for different types of facility - Kitchen: £1,000 - £1,500pcm; Cold room: £300pcm; Storage: £200pcm; Office: £24/sqft
Sector assets	No specific sector assets (eg innovation centres), other than strong existing cluster of food, wholesale and distribution businesses.
Amenities	Managerial services provided onsite, such as a receptionist, cleaners and maintenance. Commercial kitchens fitted with ventilation metered utilities, drainage and hygienic floors, walls and ceilings compliance with environmental standards. Other amenities include a loading bay area and a goods lift. In addition to 24/7 access and onsite parking. Conferencing and meeting rooms are also available. The offices have 24-hour access and high speed internet access.
Access to infrastructure/markets	Close proximity to Harlesden Tube and Railway Station; 2-3 miles from M4 Junction 1; Around 9-10 miles from Heathrow Airport
Other support available	n/a
Future growth potential	Dephna group find it difficult to find appropriate sites for development. It relies on very frequent small deliveries, requiring clear access on a regular basis. This causes greater disruption compared to other uses (e.g. distribution which have larger and less frequent deliveries). This limiting factor restricts future growth potential.

Spa Terminus, Southwark	
Sector	Food
Size	10 sites in total
Mix of uses/floorspace	Largely B1b space making use of railway arches and other light industrial space. Also mixed typologies with retail and consumption offering retail space for weekend market.
No of businesses/jobs	Approx. 30 small businesses many of which are local in their focus, supplying London's restaurants and cafes
Spatial employment typologies	Lower value industrial spaces (e.g. under railway arches) brought into productive uses to pursue longer-term place making objectives.
Price sqft/m	Unknown - Southwark Council and Network Rail have worked together to encourage like-minded business to locate, with certainty provided by medium term leases.
Sector assets	Main sector assets revolve around food manufacture and retail.
Amenities	Many of the businesses open their doors to consumers at the weekend, which has helped to establish the area as a hotspot on the London food circuit. This has swiftly helped to transform perceptions and use of a previously little visited area.
Access to infrastructure/markets	Close proximity to Bermondsey Tube Station (7-minute walk) and Maltby Street Market.
Future growth potential	Development capacity constrained by site's size. No more room to expand operations on current site.

Transport and Logistics

Heathrow Logistics Park, Heathrow	
Sector	Logistics and distribution
Size	Four logistics/distribution units totalling 317,246 sqft Unit 1: c.109,000 sqft Unit 2: c.80,000 sqft Unit 3: c.79,000 sqft Unit 4: c. 33,000 sqft
Mix of uses/floorspace	The majority of the floorspace are warehouses (275,555 sqft) with adjoining offices attached (41,691 sqft)
No of businesses/jobs	The four units will be occupied by 4 individual businesses. Employment is unknown at the moment as businesses have not yet located on site.
Spatial employment typologies	Largely suited towards medium size enterprises with little provision for flexible, subsidised or smaller units.
Price sqft/m	£14.50/sqft
Amenities	Grey-water harvesting to improve sustainability and cut down utility costs.
Access to infrastructure/markets	0.7 miles to Clockhouse Roundabout 1.6 miles to Feltham Rail Station 1.8 Miles to Heathrow Airport Cargo Terminal 2.4 miles to M3 Junction 1. Fast access to Heathrow Airport Cargo Terminal
Other support available	No business support schemes provided on site.
Future growth potential	Development capacity constrained by surrounding residential uses, two nearby school and adjoining green space. Future growth could arise from opening of new airport terminal at Heathrow, although there are no plans for this at this stage.

The Bridge, Dartford	
Sector	Logistics and distribution
Size	The bridge consists of a 264-acre area of mixed use development. The exact size of the industrial floorspace is unknown (based on identified sites it's likely to be over 12 acres).
Mix of uses/floorspace	Industrial units for B1c, B2 and B8 are available up to 100,000 sqft in size. There are four industrial/logistic sites identified, with a large Sainsbury's depot (size unknown), DHL Distribution centre (size unknown), one empty adjacent site (3.69 acres) and a Crosswater Bathroom supply warehouse (4.58acre site).
No of businesses/jobs	There is an unknown number of businesses / jobs at The Bridge. There are currently nine fully constructed buildings on site, with land available for new development.
Spatial employment typologies	Large unit sizes cater towards established enterprises.
Price sqft/m	Unknown
Sector assets	Particular specialism in engineering and IT with the Leigh Academy UTC on site. Additional specialism in sustainable construction, with the construction training and research Centre Suscon on site.
Amenities	The Nucleus business and innovation centre: offers business support, access to funding, conference and meeting rooms. Other amenities include hotel and restaurant.
Access to infrastructure/markets	Close connections to the strategic road network (less than one mile from the m25). Dartford, Gravesend and Ebbsfleet international stations are nearby and made accessible through a fastrack bus service. Fastrack bus service from Dartford, Gravesend and Ebbsfleet international.
Other support available	iLab (established in the Nucleus) is a meeting place designed to encourage innovation and creative thinking. Accommodates up to 22 people, it is available to local businesses looking for a space for team-building, brainstorming, creative development and problem-solving. Estate management on site in charge of safety, security and maintenance
Future growth potential	Addition of 1,500 new homes and 1.8 million sqft of office, science park and industrial space. Potential for further mixed use development to cater for residential needs (i.e. retail, leisure). There is currently no timescale available for when this development will occur.
Implications	Good access to strategic road network essential for logistics/distribution firms Partnering with logistics providers has ensured new units cater to the needs of firms in the sector

Advanced and Creative Manufacturing

Advanced Manufacturing Park, Sheffield	
Sector	Advanced Manufacturing, with focus on engineering, manufacturing and research
Size	100-acre
Mix of uses/floorspace	**Technology centre:** provides range of workshops ranging in size between 360 sqft to 1,300 sqft; also provides high quality office spaces suitable for between one and 60 people. **Evolution @ the AMP:** High quality industrial hybrid units ranging from 2,500-27,000 sqft
No of businesses/jobs	180 tenants and a workforce of over 700.
Spatial employment typologies	Space is largely suited towards start-up, small and medium sized businesses, or the research orientated departments of larger businesses.
Price sqft/m	Unknown. Workshops and office space only has a one-month minimum commitment.
Amenities	A range of amenities including café, 6 person meeting room, 20-person boardroom and 120 set conference room.
Access to infrastructure/markets	Minutes from junction 33 of the M1. Sheffield and Rotherham rail stations are also 10 minutes away, and there are five international airports within 90 minutes by car.
Other support available	Practical help and support is available from a network of specialist business advisors with extensive knowledge and experience in manufacturing and engineering industries. These can also help with information and advice on raising finance; skills and recruitment.
Future growth potential	Construction already underway on the Factory, a fully reconfigurable assembly and component manufacturing facility for collaborative research. Other new research buildings include the £30m National Material institute, a £20m Fast Make Centre of Excellence and a possible Energy 2050 carbon capture research development. Part of Sheffield City Region's Enterprise Zone which provides incentives for businesses to locate and invest (enhanced capital allowances and business rate relief scheme). Plans for expansion of the AMP Technology Centre by the University of Sheffield. The submitted masterplan contains 1.3 million sqm of new buildings, expected to create up to 1,800 new jobs.

Building BloQs, Enfield	
Sector	Creative Manufacturing
Size	In total the workshop is around 11,000 sqft in size. The 1 storey building is partitioned into areas based on material (i.e. Wood, metal, textiles) and specific machinery. The workshop is open access, meaning businesses can rent workspaces on a flexible and temporary basis (i.e. per hour/per day).
Mix of uses/floorspace	Range of workshop facilities including 15 wood worktops, 8 metal worktops, 6 textile worktops, a laser work area, spray work area and office area.
No of businesses/jobs	There are 33 bays available with two workers allowed on each bay. At full capacity this could support 66 workers per day.
Spatial employment typologies	Flexible workspace designed for freelance makers/designers and SMEs
Price sqft/m	A range of prices for different types of workspaces and size: • Wood workspace (per day): Small Bay £20; Medium £24; Large: £36 • Metal workspace (per day): Medium bay: £24; Large bay: £36; • Textiles (per day): Medium bay: £26 • Equipment: CNC Router: £30/hr, £70/day; CNC laser: £20/hour, £120/day • Storage (per day): Medium unit: £2; Large unit: £3; Vertical unit: £2 • Additional worker: £18 per day Access requires one off membership sign-up fee of £40
Amenities	There is available storage space and a café facility.
Access to infrastructure/markets	0.5miles to North Circular and 25-minute walk to Angel Road (National rail station). Limited access via public transport.
Other support available	Business support is offered on site, although tends to be informal. Most support is gained through the community of like-minded individuals exchanging knowledge.
Future growth potential	Building Bloqs were granted with £2.7m of support from the Mayor's Regeneration Fund to move to a larger site. The new site will transform a local warehouse into 50,000 sqft of workshop space, qualifying as the largest in Europe.
Implications	Role of employment space in place making – Building BloQs being promoted as a central anchor of Enfield's wider place making aspirations and plan at Meridian Water. There is demand for new workspace models – space provides low threshold workspace to support enterprise and to encourage collectivism and network development. Need to offer a wide range of options to cater towards creative maker needs, such as workspaces, equipment and timeframes.

Central Research Laboratory, Hayes	
Sector	Advanced and creative manufacturing – design-led hardware activities, ranging from electronics, robotics, healthcare, music
Size	N/A - CRL is based in The Old Vinyl Factory in Hayes, West London
Mix of uses/floorspace	New space provides entrepreneurs, makers and inventors with a range of resources and workspace, including prototyping facilities, mentoring, technical support
No of businesses/jobs	9 businesses have been supported so far.
Spatial employment typologies	Caters towards start-up businesses who need intensive support to help them grow.
Price sqft/m	Currently there is an offer for 12 start-ups to join a 9-month programme starting in mid-September 2016. Each team receives free office space, 24/7 access to prototyping labs, a £5k grant and commercial and product development expertise. CRL takes 6% equity in return.
Amenities	Showers, 30 secure bicycle spaces, fully serviced café. 1,000 sqft workshop area.,3D printers, 4-axis CNC Mills, Laser Cutter, Vinyl Cutter, Oscilloscope, Soldering Stations, Hot Tweezer Station, Hot Air Rework Station
Access to infrastructure/markets	Due to be connected by Crossrail via Hayes and Harlington station in 2019.
Other support available	CRL startups are provided with a large package of support in return for a 6% equity stake. For 9 months, they receive: • Daily support from in-house designers and manufacturing experts • Access to mentors • Regular workshops and masterclasses • An events programme • 24/7 access to a workspace at the Old Vinyl Factory in Hayes, West London • A £5k grant per business to support start-up costs • Access to key investors and practical help with raising funding
Future growth potential	Plans for Old Vinyl Factory site to grow and for CRL to grow with it. Plans to launch a paid membership model in September 2016 whereby start-ups can pay for desk, self-contained studios and access to prototyping labs.

ICT, Digital and Creative Services

Here East, Stratford	
Sector	ICT, Digital, Media
Size	The development features three main buildings; the first is 29,000 sqm (300,000 sqft); the innovation centre, an 79,000 sqm (850,000 sqft) building. In addition, there is a 1,000-person capacity auditorium
Mix of uses/floorspace	The individual building floorspace are as follows: **Press centre:** 195,200 sqft flexible office space; 26,764 sqft retail. **Broadcast centre:** 32,109-123,760 sqft studio space; 54,395-178,263 sqft office space; 3,037-32,217 sqft retail As part of this there is also: 29,000 sqm **innovation centre** 1,000-person auditorium, Canal side: 19,302 sqft retail The theatre: 4,077 sqft; reception; 1,120 sqft retail; 23,560 sqft restaurant/breakout & auditorium.
No of businesses/jobs	Once fully operational, Here East is expected to support 7,500 jobs, 5,300 of which will be onsite and 2,200 will be in the wider local area. Supply chain are expected to support a further 9,100 jobs throughout the UK. This level of employment equates to an additional £450m GVA to the UK economy, £340m of which will remain in the local community.
Spatial employment typologies	Here East will provide a range of spaces included open workspace, educational space, broadcast studios, office space, state of the art data centre.
Price sqft/m	Rental prices are around c.£45/sqft
Amenities	Landscaped canal side with cafes, shops and restaurants; 210 internal bicycle spaces; Specialised prototyping and making facilities; Design and Build Technology Lab
Access to infrastructure/markets	Close to Hackney Wick (Overground and National Rail) and Stratford international (15 minutes to St Pancras International).
Other support available	Acceleration and incubation programmes to support the growth and resilience of start-ups. Entrepreneurial training and regular mentoring support. Diverse funding opportunities to support entrepreneurs. The site also provides tech infrastructure such as an infinity data centre and superfast broadband.
Future growth potential	No plans to expand the building at this stage.
Implications	Flexible workspace encourages smaller businesses to set up and provides grow-on-space. Retail space, with a mix of businesses in the maker industry, helps generate a link for businesses to their customers. Creating shared active spaces promote networking and sharing between smaller and larger firms.

Tech City, East London	
Sector	ICT, Digital, Media
Size	Tech City is a cluster of high-tech firms located in inner east London. The cluster is located around Old Street roundabout, and runs North into Hoxton and Haggerston, south to the City, west into Farringdon and City Road, and east towards Bethnal Green. The wider cluster as defined by Demos covers nine inner east London wards spanning the boroughs of Islington, Hackney, the City of London and Tower Hamlets.
Mix of uses/floorspace	Total floorspace in the cluster is difficult to define due to the undefined and fluid boundary of Tech City, and informal workspaces used by workers involved in the industry (i.e. coffee shops). Tech City has a range of open workspaces, providing smaller firms with hot-desking opportunities. For example, the Google Campus provides co-working space, providing both park-time flex desks and full-time office space.
No of businesses/jobs	Tech City as defined by the wider cluster geography has around 3,300 tech firms (2013) Firms including large companies such as MindCandy, Unruly Media, Songkick and Last.fm. The cluster also contains over 49,000 digital economy jobs (2013). Silicon Roundabout, a concentrated cluster of tech firms around Old Street Roundabout, has over around 1,200 businesses (2012).
Spatial employment typologies	The cluster is concentrated around Old Street roundabout and from here runs North into Hoxton and Haggerston, south to the City and West into Farringdon and City Road. The majority of firms interviewed in a report by Demos were micro or small sized businesses. Benefits of locating in the area including amenities and 'vibe, similar firms, branding and messaging, cheap space, proximity to central London and connectivity.
Price sqft/m	Various – dependent on location c. £40+/sqft
Amenities	The large number of open workspaces and coffee shops provide flexible and inexpensive options for working and collaborating.
Access to infrastructure/markets	Access to the tech market is cited as a key advantage, with collaboration opportunities with firms in similar industries. The cluster is well connected, with a density of underground stations connecting a variety of lines (Northern, Central, Metropolitan/Circle, Overground line) and a variety of stations offering national rail connections (Old Street, Liverpool Street, Farringdon, Moorgate).
Future growth potential	Tech City's suitability for tech start-ups and SMEs has decreased in recent years, with increases in average rental prices creating issues of affordability. Future growth is likely to be driven by larger companies and multi-national corporations replacing smaller firms moving outward for more competitive rents.

Business and Professional Services

The Golden Mile, Brentford	
Sector	ICT, Digital, Media; Business and Professional Services
Size	The Golden Mile is 2.4 miles in length, extending along the Great West Road (A4) from Gillette Corner to Chiswick Roundabout.
Mix of uses/floorspace	A mix of uses, but largely large foot plate office buildings.
No of businesses/jobs	Home to around 450 businesses employing approximately 25,000 people.
Spatial employment typologies	Businesses located here are larger than elsewhere across Hounslow on average. The area contains 10 businesses employing more than 250 people.
Amenities	The quality of the amenity is currently relatively weak; the nearest town centre is Brentford, but connections are not strong. Many of the larger offices contain their own cafes / catering facilities.
Access to infrastructure/markets	While the Golden Mile benefits from strong road connectivity, congestion is a major issue. Public transport links are currently relatively weak, but there are early stage proposals for enhanced Overground links providing connections to Crossrail at Southall, HS2 at Old Oak Common
Future growth potential	Significant potential for future growth with a number of large developments proposed in the Golden Mile Capacity Study. The study suggests that around 1,600 new homes and around 18,000 new jobs will be created if all proposals and transport improvements are delivered. Growth may be constrained by proximity to heritage assets (i.e. restrictions on building heights). Future growth in part depends on the expansion of Heathrow (Third Runway), and may suffer adversely if other London airports are expanded instead of Heathrow.

Royal Docks/Isle of Dogs	
Sector	Business and Professional Services – major business district and financial centre, home to the world or European headquarters of numerous major banks, professional service firms and media organisations (inc. Barclays, Citigroup and HSBC).
Size	97-acre site
Mix of uses/floorspace	37 office buildings containing 4million sqft office and 845,000 sqft retail space.
No of businesses/jobs	The area employs around 112,000 and is home to 74,000 residents. In addition, there are 300 shops, cafes, bars and restaurants
Spatial employment typologies	Spatially concentrated with high density development (15 buildings over 60 metres tall).
Price sqft/m	c. £40/sqft
Amenities	Significant retail and leisure facilities located at Canary Wharf
Access to infrastructure/markets	Canary Wharf is well connected by the Docklands Light Rail, enabling quick access into the City of London (via Bank). The strength of the cluster has created a new financial centre in London, with financial services, banking and investment centred at this location. Good transport connections into Bank make Canary Wharf accessible to the other key cluster for financial and business services.
Future growth potential	Recently awarded planning permission for a major expansion eastwards of the canary wharf estate, with 30 new buildings totalling 1.9 million sqft office space and 4.9 million sqft retail space. The site is also part of the Isle of Dogs and South Poplar Opportunity area, with indicative capacity for 100,000 new jobs and 10,000 new homes on the 410Ha site. Level39 is Europe's largest technology accelerator for finance, retail, cyber-security and future cities and is located in Canary Wharf. This provides small businesses in these sectors the space and support to grow.
Implications	Long term nature of development of a sustainable economic hub – need for long term vision, political and strategic support and initial incentives. Importance of attracting 'anchor tenants' to help transform establish reputations. Initial subsequent transport improvements key to opening up brownfield land and changing perceptions

International Financial Services Centre (IFSC), Dublin	
Sector	Business and Professional Services
Size	Over 3.3 million sqft of office space
Mix of uses/floorspace	Largely office based with retail, leisure and residential offering.
No of businesses/jobs	Total employment in the IFSC stands at over 38,000 (a growth of 7.4% in 2015) More than 500 operations were approved to trade in under the IFSC programme. The centre is host to half of the world's top 50 banks and to half of the top 20 insurance companies. Merrill Lynch, Sumitomo Bank, ABN Amro, Citibank, AIG, JP Morgan (Chase), Commerzbank, BNP Paribas and EMRO are just some of the big-name operations that have chosen to locate in the area.
Spatial employment typologies	Compared to other financial centres, IFSC is lower density, with typical buildings being 6 – 10 stories.
Price sqft/m	Prime office rents are €55 – 60 per sqft[62]
Amenities	Significant retail and leisure facilities located on site. National College of Ireland also located on site.
Access to infrastructure/markets	The main station in Dublin, Connolly Station, is a five-minute walk from the IFSC. The area is also served by numerous bus routes.
Other support available	Companies in the IFSC in Dublin pay tax at the normal corporation tax rate of 12.5 per cent – well below many of Ireland's European competitors.
Future growth potential	There are ambitions to make the IFSC the centre of FinTech, by having less regulation than rival financial districts in the UK and Germany. £2bn is expected to be invested in the next five years developing a further 40 hectares of undeveloped land, producing more office space and 2,600 residential units. Docklands 21 is a new initiative to inspire companies, SME's, communities, institutions and professional services to improve their consumption profile. It will also encourage participants to increase their resource efficiency and optimise their energy related business operations within the IFSC area.
Implications	

[62] 2016 Dublin Office Market Outlook, JLL

Low Carbon

Copenhagen Clean Tech Cluster	
Sector	Low Carbon – focus on clean tech; energy; renewables
Size	370 hectares of space assigned to the Copenhagen Clean Tech Park in line with the Fredrickssund Masterplan. The current size of the park at present is around 70 hectares.
Mix of uses/floorspace	Varies according to nature of company. Cluster is very spread out at present.
No of businesses/jobs	Since the project started in 2009, the cluster has created 1,089 new jobs, 38 new company partnerships, attracted 12 international companies and supported 126 entrepreneurial businesses.
Spatial employment typologies	Businesses are spatially scattered, located within 2km of one another on average.
Price sqft/m	Data not available
Amenities	No specific facilities dedicated to Clean Tech Cluster.
Access to infrastructure/markets	The park benefits from close proximity to key stakeholders within the cluster. R&D support is available from government, municipality and universities. Key players include the Technical University Demand/DTU Technical Transfer program, Copenhagen Business School, Copenhagen University, Foundation entrepreneurship Denmark, Copenhagen University, The Foundation of Entrepreneurship Denmark, Copenhagen Business Services, Venture Cup Denmark, and Symbion. The site is located approximately 40km from Copenhagen (around 50mins by road or public transport).
Other support available	Projects delivered by Clean Tech Cluster are funded by funds from the EU (i.e. Horizon 2020 funds), public funding schemes (national, regional, local), philanthropic foundations and in a few cases participation fees.
Future growth potential	Over the next five years, it aims to create 1,000 new jobs, attract 25 foreign companies to the cluster, create 30 new research- and innovation- collaborations between companies and research institutions and host over 200 events.
Implications	'Clean tech' does not necessarily mean production has low level of impact on local environment (e.g. explosives manufacture located on site, improving efficiency of production). High levels of co-operation between all stakeholders crucial to understand business needs. Access to R&D institutions essential.

Life Sciences

Whitechapel Med City	
Sector	Life Sciences
Size	The Medcity Campus site has a total development potential of 38,000m2.
Mix of uses/floorspace	The key component of the development at Whitechapel is the **Whitechapel Research Institute**. This will be a focus for research in population-scale medical genomics. The institute has a total floorspace of 20,000m2, consisting of an *Academic and Health Research space* (15,000m2) able to provide space for c.2000 research staff; and a *Commercial research space* (5000 m2) which will be used for established companies (pharmaceutical multi-nationals and contract research organisations) through long term agreements. Other key buildings include: **Life science education centre:** the education centre will be around 3,000m2 and will support expansion of Queen Mary University London (QMUL)'s biomedical education activity and a base for the delivery of research linked science outreach and public engagement activities. **Innovation centre:** around 4,000m2 for an incubator facility for science and technology start-up companies in the field of life sciences. **Queen Mary Bioscience Innovation centre:** directly opposite the planned new innovation centre, totalling 5,000m2.
No of businesses/jobs	QMUL estimate the first phase of their development could accommodate 2,500 researchers, with at least 1,500 of these being in jobs which are new to the area. There is no timeline for this development available.
Spatial employment typologies	There is already a cluster of existing life science activities centred around the Royal London Hospital. The space provides laboratory facilities for a range of research activities. The different parts of the Whitechapel Research institute cater for SMEs and more established companies, supporting the life cycle from research through to commercialisation.
Price sqft/m	Unknown – still under construction
Amenities	The campus provides access to a bio-enterprise and innovation centre (currently the only purpose built laboratory for SMEs wholly let to the open market). In addition, other specialist research facilities are available, including the national centre for Bowel Research and Surgical Innovation.
Access to infrastructure/markets	Strategically significant location, connected via the Overground, and the District and Hammersmith and City Underground lines. Crossrail is due to open in 2018 at Whitechapel, shortening journey times to a number of major growth areas including Canary Wharf, City Airport, Bond Street, Stratford City and Heathrow. Whitechapel has London's largest hospital providing a readymade market and a practical arena for testing innovation.
Other support available	Unknown – still under construction. Likely to involve high level of business support for start-ups, enabling them to grow quickly.
Future growth potential	Whitechapel SPD suggests the wider area has potential to deliver 3,500 new homes by 2025 and 5,000 new local jobs up to 2028.
Implications	Connections to local universities and research institutions are vital to ensuring access to latest research. Innovation centre supports businesses and fosters links with businesses who have spun out of the campus. Flexible lab space vital for small and developing businesses.

Imperial Incubator and White City Campus – Yet to open	
Sector	Life sciences, bio-med, science & technology
Size	25-acre site
Mix of uses/floorspace	The campus has a range of flagship buildings catered to supporting the life science sector. **Translation & Innovation Hub** Office: 109,895 sqft - 169,427 sqft NIA Laboratories: 0- 64,161 sqft Food & beverages: 0-10,414 sqft Services: 0-4,629 sqft **Molecular Sciences Research Hub** 275,000 sqft research facilities, including laboratory and office uses. **Michael Uren Biomedical Engineering Research Hub** 13 store centre housing research laboratories, an outpatient clinic, a 150-seat auditorium and series of social spaces. **Imperial Incubator:** Two storey, 24,000 sqft incubator facilities with turn-key office and laboratory space. Also offers meeting rooms, kitchen facilities and communal open space.
No of businesses/jobs	In the White City Opportunity Area there are plans for 10,000 new jobs and a minimum of 6,000 new homes.
Spatial employment typologies	The campus will provide a range of space to support firms at all stages of the commercialisation process. This includes incubator, accelerator and office space; an auditorium and a clinic.
Price sqft/m	Unknown – still under construction.
Amenities	Imperial Incubator – has a Business Centre comprising 6 office cubicles rentable on a short term basis. Four meeting rooms are available to accommodate between 10 and 30 people. Virtual tenancy options are also available for firms wanting a presence in London.
Access to infrastructure/markets	Short walk from White City underground station (central line) and 5-minute walk from Wood Lane (Circle and Hammersmith & City), London Paddington accessible via 15-minute journey. Good road connectivity with the A40 passing through the campus.
Other support available	Unknown – still under construction. Likely to involve high level of business support for start-ups, enabling them to grow quickly.
Future growth potential	Located within the White City opportunity area (which aims to attract new homes and jobs), the campus has a focus on creative industries and bio-medical research. This will help to create a more attractive and thriving area, which in turn will attract more homes and jobs to the area.
Implications	Has implications for the OOPR area given its close proximity. May detract from attempts to encourage the sector into the OOPR area, although there are opportunities for collaboration, with grow-out space provided for businesses too big to stay at the Incubator.

Francis Crick Institute	
Sector	Life Sciences and biomedicine – activities range from neuroscience, pandemics and genome-editing to support value chain from R&D through to commercialisation.
Size	84,000 sqm building
Mix of uses/floorspace	8,000 sqft labs (D1); 450 seat auditorium Exhibition space.
No of businesses/jobs	When fully occupied and operational in early 2017 the Francis Crick Institute will employ 1,500 staff.
Spatial employment typologies	8000 sqft high specification labs and event space.
Price sqft/m	Unknown at present. Space is not being let out to external organisations until 2017, when a full understanding of their own spatial requirements has been carried out.
Amenities	A 450 sqm community facility 'Living Centre' will provide an area for exercise activities, two meeting/training rooms and smaller one-to-one rooms. In addition, the exhibition/gallery space will enable staff to showcase projects and research findings to the public, stakeholders and other industry experts. 450 seat auditorium provides space for lectures, talks and events.
Access to infrastructure/markets	Transport: well connected via Kings Cross/St Pancras and Euston Station. The Francis Crick is well position within the local life science cluster, consisting of the UCL campus, UCL hospital and the Welcome Trust. In addition, the new Kings Cross development is home to a developing tech cluster, with opportunities to combine life-science practices with tech innovations.
Other support available	None available at present.
Future growth potential	The site is constrained by availability of space, given its location on the edge of a residential neighbourhood. Growth is likely to arise from a continued policy focus from the GLA on the development of the MedCity vision and future developments along the Euston corridor (e.g. HS2).

Regeneration Area Comparators

Competitor Analysis – Major Regeneration Areas

	Overview	Trajectory Overview of Growth Proposals	Employ. Growth	Sector Aspirations	Housing Growth	Timescales
King's Cross – St Pancras	A 53ha site which has experienced significant transport improvements over the last decade. Total of 914,000 sqm net of new workspace; up to 152,000 sqm of retail, cafes, bars, restaurants and leisure facilities; up to 2000 new homes.	A new commercial quarter, with high density commercial, office, retail, leisure and housing uses. Links with academic sector and businesses (e.g. Francis Crick Institute).	+25,000 jobs	Creative sectors - esp. software and electronic publishing, advertising and video/film production; tourism; retail	+1,900 homes	The implementation plan sets out target take up rates of development per annum from 2006. **Business and employment space**: 30,000 – 50,000 sqm per annum. Completion due 2024- 2036 **Market housing:** 150 – 200 units per annum. Completion due 2016-2019 **Other uses – retail, leisure, health, education and community:** 10,000 – 15,000 sqm per annum. Completion due 2016-2021.
Euston	An 85ha site set to experience significant development in the future with HS2 terminus	50-70,000 sqm of knowledge sector space. 60% 'office' development, 30% for R&D activities and 10% retail. larger innovation hub, for digital creative businesses	+7,700 jobs	Knowledge, science and creative sectors	+2,800 homes	Implementation plan categorises delivery of development in short, medium and long term stages. **Station redevelopment**: mixed residential and commercial development. **(Medium term - 2019 onwards)** **Knowledge quarter:** 30% of commercial floorspace as knowledge, science, medical and creative uses. **(Long term - 2024 onwards)**
Paddington	A 38ha site which has already undergone significant redevelopment, with more expected with Crossrail	Development of medium height large floorplate buildings with focus on office space. Design new areas around Paddington's canal-side character.	+5,000 jobs	Professional services, retail	+1,000 homes	2010/11 - 2024/25
White City	A 110ha area set to be redeveloped around	Intensification of housing to support regeneration of area. Enhance	+10,000 jobs	Creative, academic,	+6,000 homes	2011 – 2026/31

	Westfield Centre and the former BBC Media Village. Close proximity to OPDC area	education and research capabilities of area (esp. in healthcare and bio-tech). Improvements to connections with other areas		technology and small business sectors (broadcasting at former BBC site). Healthcare and bio-technology.		
Wembley	A 239ha area around Wembley stadium and the industrial estate. Close proximity to OPDC area	New housing and leisure developments integrated with arena and conference centre combined with improvements to transport for heavy usage. Building 30,000 sqm of new retail floorspace.	+10,000 jobs	Retail, offices, hotels, conference facilities, sports, leisure, tourism, creative industries and educational.	+11,500 homes	Total development delivered in three phases and expected to be delivered from 2035. <u>Phase 1</u> **North East District**: 580 jobs created, 105,000m2 new floorspace delivered **First way district**: 315 jobs created, 123,000m2 new floorspace. <u>Phase 2</u> **North West district**: 921 jobs created, 166,00m2 floorspace, civic centre **Olympic Way District:** 490 jobs created, 140,000m2 new floorspace <u>Phase 3</u>: **Danes and Empire Court**: new park and residential use, **Eastern Lands District:** 1,559 jobs created, 129,000m2 new floorspace.
Brent Cross	A £4bn masterplan to create a new town centre, with improved public transport connections	Redevelopment of shopping centre, combined with significant housing growth.	+27,000 jobs	Retail, offices.	+7,500 homes	The masterplan will be delivered in three phases. **Phase one**: town centre development, new bus station, redevelopment of west Hendon area. **Phase 2**: residential development at the south end of the area. Completion of West Hendon. Delivery of a mix of uses on the north side of A406 North Circular. **Phase 3**: completion of waste handling facility and mixed use development.
Golden Mile	A 2.4-mile-long corridor in Hounslow, home to some of	The Great West Corridor Plan is currently being developed to	TBC	Creative media, IT and	TBC	Consultation is still ongoing regarding the uses, design and scale of development along the Golden Mile. The

	the UK's most recognisable media and IT firms.	regenerate the Golden Mile corridor to take advantage of its already strong performance.		digital technologies		recent Capacity Study identified four main development areas: Blue Sky, North Lock, M4 Gateway and Kew Gate.
Curzon Street – Birmingham	New HS2 station in Birmingham providing a catalyst for regeneration and growth.	600,000 sqm employment space created around new station, with zones for retail, business, visitors, creative and learning and research.	+14,000 jobs	Retail, tourism, creative, business, learning and research	+2,000 homes	Construction period begins in 2017 and Phase one opens to passengers in 2026. Exact phasing will be subject to the speed with HS2 is delivered. By 2026 the following will be delivered: **BCU Campus**: first phases have opened and provided accommodation for 3,000 students. **Eastside Locks:** mixed use development providing a range of office, leisure, retail, residential and hotel uses. **Beorma Quarter Phase 1 and 2:** major mixed use development with business space, hotel and leisure uses.
Heathrow	A 700ha area around Heathrow utilising the airport to drive economic growth within the opportunity area.	Redevelopment of RAF Uxbridge site, redevelopment opportunities in the Hayes-West Drayton corridor and continued airport related growth in Hillingdon.	+12,000 jobs	Logistics, hotels and leisure and tourism, bio-science, creative/media	+9,000	Specific phasing not available. The council are due to prepare a Local Development Document for the Heathrow area in consultation with the GLA and LB Hounslow.
Earls Court	A 38Ha area in Earls Court with a strong identity, distinctive townscape and good transport links.	The exhibition complex and the transport for London Lillie Bridge road depot are key opportunities for employment growth, alongside redevelopment of local authority housing estates.	+9,500 jobs	Leisure, cultural, visitor attractions, offices, retail, hotels.	+7,500 homes	Design proposals for the first phase of the masterplan have been approved and initial construction activities are underway. This phase includes 1,300 new homes and 1,800 sqft of community, health and leisure facilities. Progress on two of the four large sections of the project are currently on hold, with plans under review by the Mayor of London.
Stratford (Lower Lee Valley)	The 1,400Ha aims to secure the legacy of the 2012 Olympic games and is the most important strategic regeneration initiative for London. Olympicopolis is a scheme which seeks to develop a culture and education district in the area.	Stratford City is recognised as one of London's strategic office centres, set to provide 30,000 office jobs and 32,000 homes. The Queen Elizabeth Olympic Park has potential to become a new mixed use city district, whilst a number of strategic industrial locations will be released for mixed use development.	+50,000 jobs	Office, retail	+32,000 homes	The Local plan designates four sub areas, with specific development targets provided for the following: **Hackney Wick and Fish Island:** 2,000 new homes with planning permission, potential for 2,500 homes by 2030. Planning permission for 30,000 sqm employment, leisure, retail, community and education. Potential for additional 20,000 sqm mixed use. **North Stratford and Eton Manor:** 1,105 housing units delivered from 2015. Permission for 248 residential units, 25,500 sqm hotel, 3,000 sqm retail, 2,000 sqm leisure.

ABP Royal Docks	Regeneration of 1,100Ha dockland area building upon iconic development such as the Siemens Crystal and Emirates Air Line cable car.	Regeneration of Silvertown Quays, Royal Albert Dock and Royal Albert Basin. Creation of London's first Asian business park and potential for a new 'floating village' to accommodate at least 11,000 new homes.	+6,000 jobs	Office, retail	+11,000 homes	The first phase was granted detailed planning approval in July 2014, with the development starting on site in 2016.Phase 1 is due to be completed in mid-2018.
Vauxhall nine Elms	A 227Ha area around Battersea Power station, all located in the CAZ.	Battersea Power Station site potential for significant mixed use development	+25,000 jobs	Office, leisure, retail	+20,000 homes	By 2020, two-thirds of new commercial space is due to be delivered as well as the re-opening of Battersea Power Station.
Canada Water	46Ha area around Canada Water station, connected on the Jubilee and Overground line.	Canada Water has potential to evolve into a Major town centre subject to retail demand. Also potential to develop a new science cluster linked to King's College University.	+2,000 jobs	Retail	+3,300 homes	Currently a draft masterplan has been proposed with ongoing discussions. Construction on site is due to start in 2017, with development phased over 15 years.
Silvertown	A 20Ha area on former docklands area between Canary Wharf, The O2 and London City Airport.	Potential to create a new creative hub for London, offering a new easily accessible location for innovative businesses.	+20,700 jobs	Office, leisure,	+3,000 homes	Planning permissioned acquired in 2015 with development aiming to create 20,700 jobs over the next 10 years. The first phase includes the 450,000 sqft Millennium Mills building (providing space for 150 businesses) and aims to be finished by 2018.
Wood Wharf	The 9Ha site will broaden and extend the Canary Wharf Estate, contributing a greater cultural and community offer to the area.	The area will transform the semi-derelict sites into a new residential led, mixed use, waterside community in close proximity to Canary Wharf. The mix of uses includes 1.9m sqft of commercial offices and 275,000 sqft of retail.	+ 11,000 jobs	Leisure, office, retail	+ 1,700 homes	The development is expected to be completed in four phases between 2024-2029.
Greenwich Peninsula	The 259Ha area is a major contributor to meeting London's housing need as well as internationally significant leisure attraction.	Focus of commercial development towards the north near the O2 Centre and the Jubilee Line station.	+7,000 jobs	Office	+13,500 homes	The Upper Riverside development containing 1,007 new apartments commenced in March 2015. The first phase of the project will see 464 homes provided in two buildings of 21 and 23 stories, located closest to The O2, completed in March 2018. Construction on the second phase commenced in June 2016 and is expected to take four years.
Croydon	A 194Ha area with ambitions to regenerate the commercial and retail heart of Croydon, establishing a new destination for businesses in London.	Potential for Croydon to capitalise on its strengths as a strategic office location. Development sites include East Croydon station, Fairfield Halls, Croydon College, Park place and the Whitgift redevelopment.	+7,500 jobs	Office, retail	+7,300 homes	The development of the cultural and educational quarter is a 10 – 15-year programme and will take place over three phases with Phase 1 commencing in July 2016. Work on the Westfield shopping centre has been delayed until 2017, with a revised completion date of 2020.

Appendix B - Detailed Analysis of Employment Forecasts

B.1 The detailed analysis of employment forecasts below supplements the summary analysis contained in Chapter 5.

B.2 There are numerous employment projections available which can help to estimate the scale of employment and sectors which may develop in the future. The forecasts which are analysed in this report are shown in the table below, with a brief description on the differences between each one.

Employment Forecasts Used		
Forecasts	Comments	Caveats
Updated GLA Forecasts	• Triangulated forecasts, which match up trend-based forecasts with planned transport improvements and the availability of land for new employment sites	• Borough-level data only available for total employment • Sector data only available at the London level.
Cambridge Econometrics Forecasts	• Provides sector projections for the period to 2051 at the Borough level	• Forecasts are unconstrained and are not consistent with those used within the GLA's policy and evidence base. • Based on historic trends / growth
Evidence from Existing Policy	• Uses existing evidence from Employment Land Studies to show what employment is expected in each area	• Only specific to individual boroughs • Not recently updated to take into account recent changes to the economy's composition

2016 GLA Employment Forecasts

B.3 Employment forecasts for the London boroughs are produced by GLA Economics, with the most recent projections released in June 2016. They are calculated through a 'triangulation' process, which matches up macro-economic employment forecasts on a regional level to micro-economic factors at borough level. These include:

- Trend analysis of the major employment sectors in each borough taking account of the effects of the recent recession and prospects for future growth
- Transport improvements planned for each borough
- The availability of land for the development of new office employment sites in each borough, with the forecasts assuming that vacant industrial sites will become residential over the time period

B.4 These forecasts replaced the trend-based projections released in Working Paper 67 in July 2015 which did not take into consideration the micro-economic factors mentioned above.

B.5 Employment growth is expected across all three boroughs throughout the plan period. Hammersmith and Fulham is projected to have the highest employment growth rate, peaking between 2033 and 2037 with a 13.6% employment growth over the five year. With the exception of 2023-27, Hammersmith and Fulham is projected to have employment growth above the London level. By comparison both Brent and Ealing are projected to have employment growth below the

London level across all time periods to 2041. Brent is projected to have a slightly higher growth rate than Ealing, peaking between 2037 and 2041 at +2.9% over five years.

B.6 In absolute terms:

- Employment in Brent is projected to increase by 13,800 jobs in the period to 2041, a total increase of 11%
- Employment in Ealing is projected to increase by 12,000 jobs in the period to 2041, a total increase of 8%
- Employment in Hammersmith and Fulham is projected to increase by 71,800 jobs in the period to 2041, a total increase of 48%. This is largely because the Old Oak area (and developments in White City) lie within the borough.

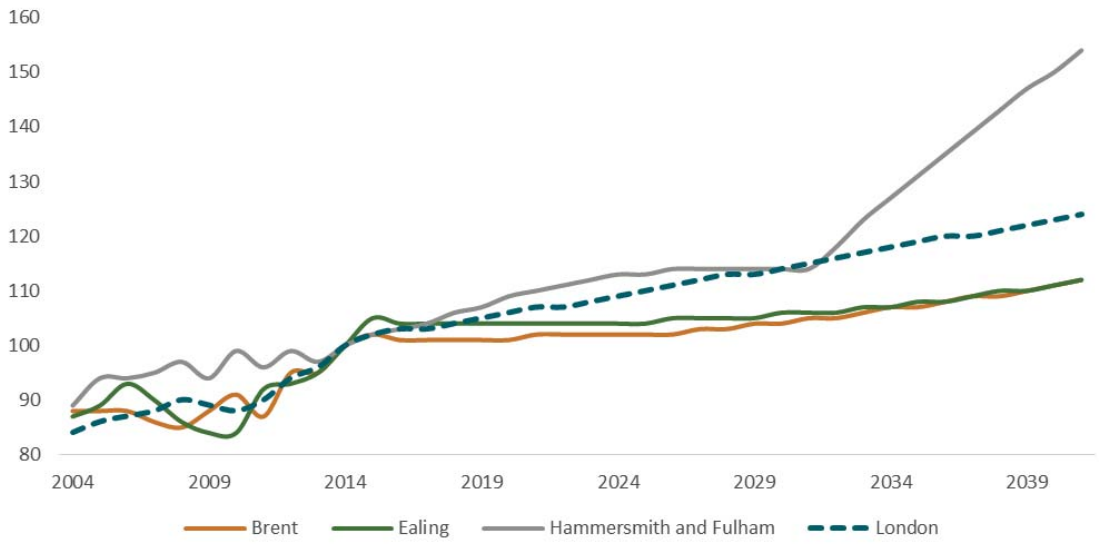
Table 6.5 Projected Employment Growth Across 3 Boroughs and London

	Brent	Ealing	Hammersmith and Fulham	London
2017-23	+1,000 (+0.8%)	+200 (+0.1%)	+9,800 (+6.5%)	+217,000 (+3.9%)
2023-27	+1,400 (+0.9%)	+1,200(+0.6%)	+4,000 (+1.9%)	+226,800 (+3.9%)
2028-32	+3,200 (+2.0%)	+2,400 (+1.2%)	+6,200 (+3.8%)	+235,800 (+3.9%)
2033-37	+4,200 (+2.5%)	+4,200 (+2.1%)	+30,200 (+13.6%)	+244,800 (+3.9%)
2037-41	+4,000 (+2.9%)	+4,000 (+2.4%)	+21,600 (+10.8%)	+201,600 (+3.1%)
Total	+13,800 (+10.6%)	+12,000 (+7.5%)	+71,800 (+47.8%)	+1,126,000 (+20.0%)

Source: GLA Employment Forecasts, 2016

B.7 These overarching trends are illustrated below. The chart highlights the diverging prospects for Hammersmith and Fulham compared to Brent and Ealing.

Figure 6.2 Projected Employment Growth in 3 Boroughs and London



Source: GLA Employment Forecasts, 2016; Indexed where 2015 = 100.

B.8 GLA Employment Forecasts also provide data on sector growth, however this is only available at the London level and is not specific to local authorities. Sectors which are projected to experience

the highest growth rates across London over the next 25 years are professional, real estate, science and technology (+44%), ICT (+36%), education (+33%) and arts, entertainment and recreation (+31%).

B.9 Sectors which are expected to experience a decline over the next 25 years are manufacturing (-39%), wholesale (-19%), primary and utilities (-13%), transport and storage (-12%) and public administration and defence (-8%).

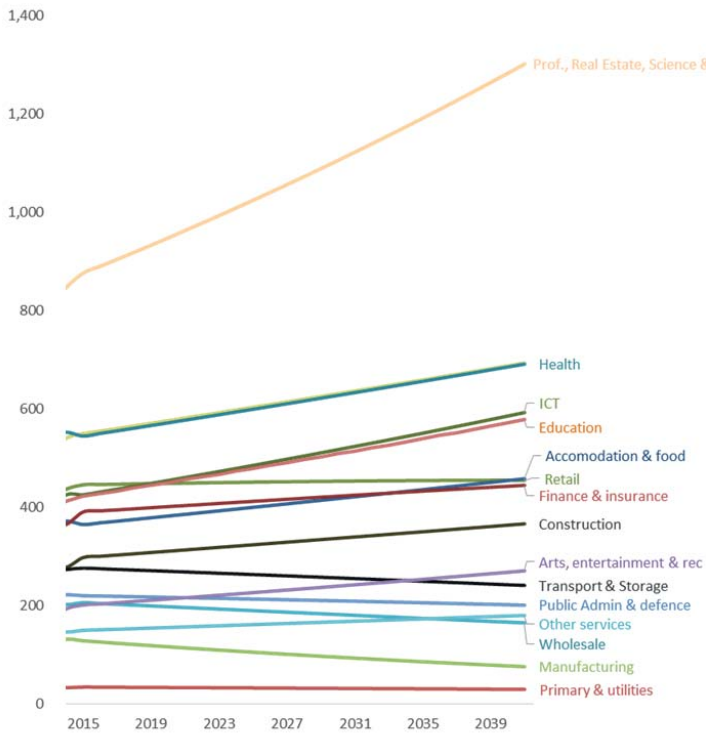
Table 6.6 Projected Employment Growth by Sector for **London**

	2017-22	2023-27	2028-32	2033-37	2037-41	2017-41
Primary & utilities	-2.0%	-2.1%	-2.2%	-2.3%	-2.4%	-13%
Manufacturing	-7.6%	-7.7%	-7.8%	-7.9%	-8.0%	-39%
Construction	+3.4%	+3.3%	+3.2%	+3.1%	+3.0%	+21%
Wholesale	-3.2%	-3.3%	-3.4%	-3.5%	-3.6%	-19%
Retail	+0.5%	+0.4%	+0.3%	+0.2%	0%	+2%
Transport & Storage	-1.9%	-2.0%	-2.1%	-2.2%	-2.3%	-12%
Accommodation & food	+3.8%	+3.6%	+3.5%	+3.4%	+3.3%	+23%
ICT	+5.4%	+5.3%	+5.2%	+5.1%	+5.0%	+36%
Finance & insurance	+2.2%	+2.1%	+2.0%	+1.9%	+1.8%	+13%
Prof, Real Estate, Science, Tech	+6.5%	+6.3%	+6.2%	+6.1%	+6.0%	+44%
Admin & support services	+3.8%	+3.7%	+3.6%	+3.5%	+3.4%	+24%
Public Admin & defence	-1.2%	-1.3%	-1.4%	-1.5%	-1.6%	-8%
Education	+5.1%	+5.0%	+4.9%	+4.8%	+4.7%	+33%
Health	+3.9%	+3.8%	+3.7%	+3.6%	+3.5%	+24%
Arts, entertainment & rec	+4.9%	+4.7%	+4.6%	+4.5%	+4.5%	+31%
Other services	+3.1%	+2.9%	+2.8%	+2.7%	+2.7%	+18%
London total	**+3.1%**	**+3.1%**	**+3.1%**	**+3.1%**	**+3.1%**	**+20%**

Source: GLA Employment Forecasts, 2016

Figure 6.3 Projected Sector Growth in London

B.10 The strong growth in the professional, real estate, science and technology sectors across London over the next 25 years, means that this sector will have almost twice the number of employees as the next largest sector (health) by 2041. The ICT sector is expected to become the third largest sector in around 2020, with accommodation and food, and finance and insurance also becoming large sectors given their expected growth.



Source: GLA Employment Forecasts, 2016

Cambridge Econometrics Forecasts

B.11 Given the above caveats regarding the GLA forecasts, Cambridge Econometrics employment forecasts have been purchased to better understand what sectors are expected to grow at a localised geography. Cambridge Econometrics projections are baseline economic projections based on historical growth in the local area relative to the region or UK (depending on which area it has the strongest relationship with), on an industry-by-industry basis. It assumes that those relationships will continue into the future. Therefore, if an industry in the local area outperforms the industry in the region (or UK) as a whole in the past, then it is assumed it will do so in the future. Similarly, if it underperformed the region (or UK) in the past then it will be assumed to underperform the region (or UK) in the future.

B.12 The projections assume that economic growth in the local area is not constrained by supply-side factors, such as population and the supply of labour. No explicit assumptions have been made with regard to population, activity rates and unemployment rates in the projections. They assume that there will be enough labour (either locally or through commuting) with the right skills to fill the jobs. The projections have not been updated recently to take into consideration the recent EU referendum result, which may impact on the economy.

B.13 The employment projections expect that employment growth in Brent, Ealing and Hammersmith and Fulham will be lower over the next 35 years compared to London. London's employment base is expected to grow by 16% between 2014 and 2051, compared to 12% across Brent, Ealing and Hammersmith and Fulham.

Figure 6.4 Past and Projected Employment Growth, 1981 - 2051



Source: Cambridge Econometrics & Regeneris Consulting, 2016

Note: Indexed data where 2014 = 100

B.14 Strong employment growth in Brent, Ealing and Hammersmith and Fulham is expected across the local services and business and professional services sectors. Growth is particularly expected in business support services (+25% between 2017 and 2041), hospitality, leisure and recreation (+22%), other services (+21%) and ICT, Media and Creative (+19%).

B.15 Sectors which are expected to decline between 2017 and 2041 include higher tech manufacturing (-49%), general manufacturing (-48%), transport (-31%) and food manufacturing (-29%). Contrary to this trend, growth of 13% is projected in logistics and warehousing.

Table 6.7 Projected Employment Change by Sector for **Brent, Ealing and Hammersmith and Fulham**

		2017-22	2023-27	2028-32	2033-37	2037-41	2017-41
Primary	Agriculture & Mining	-14%	-11%	-10%	-10%	-10%	-50%
	Utilities & Waste	2%	2%	2%	1%	1%	9%
Manufacturing	Creative & Media	1%	1%	1%	1%	1%	5%
	Food	-5%	-5%	-6%	-6%	-6%	-29%
	General	-10%	-9%	-10%	-12%	-13%	-48%
	Higher Tech	-9%	-10%	-13%	-11%	-11%	-49%
Wholesale, Logistics, Transport	Transport	-10%	-7%	-5%	-5%	-5%	-31%
	Warehousing & Logistics	4%	2%	2%	2%	2%	13%
	Wholesale	0%	0%	-1%	0%	0%	-2%
Local Services	Construction	4%	2%	2%	0%	0%	10%
	Hospitality, Leisure & Rec	7%	4%	3%	2%	2%	22%
	Public Admin, Education & Health	1%	1%	1%	0%	1%	5%
	Retail	2%	0%	0%	0%	0%	2%
Business and Professional Services	Business Support Services	4%	4%	4%	4%	4%	25%
	Finance & Professional	2%	1%	1%	1%	1%	8%
	ICT, Media & Creative	5%	2%	2%	3%	3%	19%
	Other Services	3%	3%	3%	3%	4%	21%
Total		**2%**	**1%**	**1%**	**1%**	**1%**	**7%**

Source: Cambridge Econometrics & Regeneris Consulting, 2016

B.16 Expectations for employment across London are broadly expected to match expectations in the three Boroughs. Large employment growth is expected across local service and business and professional services, with a decrease in employment expected across manufacturing, transport and wholesale sectors. Again, growth is projected in warehousing and logistics.

Table 6.8 Projected Employment Change by Sector for **London**

		2017-22	2023-27	2028-32	2033-37	2037-41	2017-41
Primary	Agriculture & Mining	-13%	-11%	-10%	-10%	-9%	-48%
	Utilities & Waste	3%	2%	2%	1%	0%	10%
Manufacturing	Creative & Media	-2%	-1%	0%	1%	1%	-1%
	Food	-6%	-6%	-6%	-6%	-7%	-30%
	General	-9%	-8%	-10%	-11%	-12%	-45%
	Higher Tech	-9%	-11%	-13%	-12%	-12%	-51%
Wholesale, Logistics, Transport	Transport	-6%	-4%	-3%	-3%	-3%	-20%
	Warehousing & Logistics	4%	2%	2%	2%	2%	15%
	Wholesale	0%	0%	-1%	0%	0%	-2%
Local Services	Construction	4%	2%	2%	0%	1%	11%
	Hospitality, Leisure & Rec	6%	4%	2%	2%	2%	19%
	Public Admin, Education & Health	1%	1%	1%	0%	1%	4%
	Retail	1%	0%	0%	0%	0%	1%
Business and Professional Services	Business Support Services	4%	5%	5%	4%	4%	28%
	Finance & Professional	3%	2%	2%	1%	2%	12%
	ICT, Media & Creative	5%	2%	2%	3%	3%	19%
	Other Services	4%	4%	4%	4%	4%	24%
Total		**3%**	**2%**	**1%**	**1%**	**2%**	**10%**

Source: Cambridge Econometrics & Regeneris Consulting, 2016

Other Forecast Evidence from Existing Policy

B.17 In addition to considering up to date employment forecasts, it is also important to reference growth projections and trajectories contained within published policy documents.

Table 6.9 Employment Projections from local Employment Land Reviews

Source	Comment
OPDC Industrial Land Study, 2016	• The OPDC Industrial Land Review, makes projections for the future demand of industrial space in the OPDC area. It uses the GLA Industrial Land Release Benchmarks report (2011) to project changes in the number of manufacturing jobs over the next twenty years. This projects significant declines in manufacturing employment across London in the period to 2031 – and particularly in Ealing and Brent. However, it is expected that the supply of industrial land over the plan period will fall significantly short of the assessed minimum demand. For prime industrial locations, the result is that demand for industrial lad exceeds physical capacity. It concludes that there is no limit to demand for industrial space in Old Oak and Park Royal. • **Implications**: While the Industrial Land Release Benchmarks report is currently being updated, the conclusion that there is no limit to demand for industrial space in OPDC area remain significant for this report.
Brent Employment Land Demand Study, 2013	• Based on GLA Economics forecasts from December 2011, it is expected that employment for office-based employment will fall by 0.2% in Brent (2012-26) and industrial-based employment will fall by 2.3% over the same period. • Across Brent's Property Market Area (including Ealing, Brent, Hounslow and Hillingdon), office-based employment is expected to increase by 1.0%, and industrial-based employment is expected to decrease by 1.5%. • Given that this is based on trend-based forecasts in the aftermath of the recession, it is likely that this underestimates potential employment growth, with major projects in Brent including Old Oak, Wembley AAP and increasing demand for out of town office space with good transport connections. • **Implications**: Given the age of the document and forecasts used, more recent studies such as the OPDC Industrial Land Review appear more relevant.
Ealing Employment Land Review, 2010	• Based on GLA borough projections published in Working Paper 39 (November 2009), it is expected that employment will increase by 11,000 jobs between 2011 and 2026 (8%, annual growth rate of 0.5%). • There is expected to be a shift in demand from industrial to office premises, with an 18.3% increase in demand for office space (2011-26), and a 19.8% decrease in demand for industrial space over the same time period. Demand for other employment space is expected to increase by 14.9% over the same period, (this includes warehouses and workspaces) • **Implications**: Given the age of the document and forecasts used, more recent studies such as the OPDC Industrial Land Review appear more relevant.
Hammersmith and Fulham Employment Land Assessment – 2005 and 2010	• The Hammersmith and Fulham Employment Land Review was produced in 2005 and while an update statement was produced in 2010, much of this is based on information which is now out of date. • Consultation has highlighted that a new Hammersmith and Fulham Employment Land Study is currently being produced. • **Implications**: Given the age of the document and forecasts used, more recent studies such as the OPDC Industrial Land Review appear more relevant.

Source: Brent Employment Land Demand Study, 2013, Ealing Employment Land Review, 2010 and Hammersmith and Fulham Employment Land Assessment –Updating Statement, 2010

Comparing the Forecasts

B.18 Employment projections – largely speaking, employment projections suggest there will be future growth in service sectors, with decline in industrial sectors. Professional and financial services and ICT, Media and Creative services are expected to grow strongly, but employment decline is expected in manufacturing and transport. Evidence from Cambridge Econometrics suggests the potential for growth in warehousing and logistics (this sector is not disaggregated within GLA forecasts).

Comparison between Economic Forecasts, 2017-41

		GLA Forecasts (London)	Cambridge Econometrics	
			London	3 OPDC Boroughs
Primary	Agriculture & Mining	-4,300 (-13%)	-4,500 (-48%)	-200 (-50%)
	Utilities & Waste	-4,300 (-13%)	+3,000 (10%)	+200 (9%)
Manufacturing	Creative	-47,700 (-36%)	-300 (-1%)	+100 (5%)
	Food		-12,000 (-3%)	-4,600 (-29%)
	General		-22,000 (-45%)	-2,900 (-48%)
	Higher Tech		-17,500 (-51%)	-2,200 (-49%)
Wholesale, Logistics, Transport	Transport, Warehousing & Logistics	-103,100 (-14%)	-21,000 (-4%)	-3,500 (-6%)
Local Services	Construction	+63,500 (37%)	+33,300 (11%)	+2,900 (10%)
	Hospitality, Leisure & Recreation	+64,800 (33%)	+133,400 (19%)	+11,400 (22%)
	Public Admin, Education & Health	+263,000 (22%)	+47,800 (4%)	+4,400 (5%)
	Retail	+7,900 (2%)	+6,100 (1%)	+1,000 (2%)
Business and Professional Services	Professional and Financial Services	+447,000 (25%)	+157,600 (12%)	+5,000 (8%)
	Business Support Services	+133,500 (23%)	+157,400 (28%)	+11,500 (25%)
	ICT, Media & Creative	+156,000 (37%)	+91,400 (19%)	+7,900 (19%)
	Other Services	+28,100 (19%)	+20,600 (24%)	+1,900 (21%)
Grand Total		+861,500 (15%)	+573,200 (1%)	+32,900 (7%)

Source: GLA Economics, Cambridge Econometrics

Appendix C - Employment Densities

C.1 The Homes and Communities Agency (HCA) provides guidance on average employment densities for different employment uses. The latest guidance was published in 2015, and average densities for relevant uses are summarised below.

Table 6.10 HCA Employment Densities

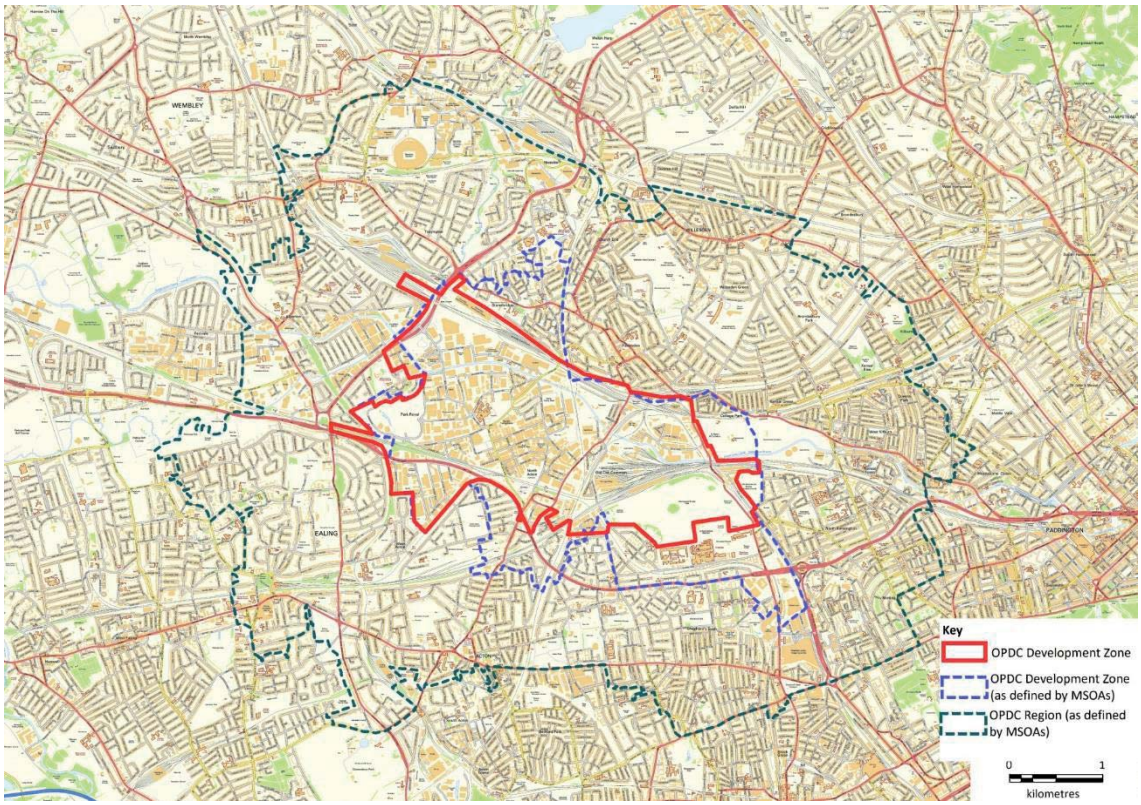
Use Class	Sub-Category	Sub-Sector	Employment Density (sqm)	Measure
B1a	General Office	Corporate	13	NIA
		Professional Services	12	NIA
		Public Sector	12	NIA
		TMT	11	NIA
		Finance & Insurance	10	NIA
	Call Centres		8	NIA
B1b	R&D Space		40-60	NIA lower densities will be achieved in units with higher provision of shared or communal spaces
B1c	Light Industrial		47	NIA
B2	Industrial & Manufacturing		36	GIA
B8	Storage & Distribution	National Distribution Centre	95	GEA
		Regional Distribution Centre	77	GEA
		'Final Mile' Distribution Centre	70	GEA
Mixed B Class	Small Business Workspace	Incubator	30-60	B1a, B1b – the density will relate to balance between spaces, as the share of B1a increases so too will employment densities.
		Maker Spaces	15-40	B1c, B2, B8 - Difference between 'planned space' density and utilisation due to membership model
		Studio	20-40	B1c, B8
		Co-Working	10-15	B1a - Difference between 'planned space' density and utilisation due to membership model
		Managed Workspace	12-47	B1a, b, c
B8 / Sui Generis	Data Centres	Wholesale	200-950	
		Wholesale Dark Site	440-1,400	
		Co-location Facility	180-540	
A2	Finance & Professional Services		16	NIA

Source: HCA, 2015

Appendix D - A Note on Geographies

D.1 The geographies used in the analysis are the same as those used in the OPDC Socio-Economic baseline (2016). A map of these areas is shown below.

Figure 6.5 Geographies used for analysis



Source: Regeneris Consulting, 2016, based on OPDC Socio-Economic Baseline (2016) definitions

D.2 To aid the statistical analysis of Old Oak and Park Royal, the following MSOA areas have been selected to represent the OPDC Development Area and the OPDC Region. As mentioned in the main body of the report, the MSOA definition does not directly align to the defined OPDC Development Area, as it also includes Hammersmith Hospital and the former BBC Media Village (now known as White City Place).

Table D.1 Geographies used for Analysis

	MSOA Definition
OPDC Development Area	Brent 027 Ealing 015 Hammersmith and Fulham 001
OPDC Region	Brent 017 Brent 020 Brent 021 Brent 022 Brent 024 Brent 025 Brent 026

	Brent 027 Brent 029 Brent 030 Brent 031 Brent 032 Brent 033 Ealing 011 Ealing 013 *Ealing 015* Ealing 020 Ealing 021 Ealing 024 Ealing 025 Ealing 027 *Hammersmith and Fulham 001* Hammersmith and Fulham 002 Hammersmith and Fulham 003 Hammersmith and Fulham 004 Hammersmith and Fulham 005 Hammersmith and Fulham 006 Kensington and Chelsea 001 Kensington and Chelsea 002 Kensington and Chelsea 003 Kensington and Chelsea 004 Kensington and Chelsea 005 Kensington and Chelsea 007 Westminster 004 Westminster 005
West London Alliance	Barnet Brent Ealing Hammersmith and Fulham Harrow Hillingdon Hounslow

Appendix E - Measuring Local Employment

E.1 This note has been produced to respond to queries by the OPDC regarding the methodology for measuring the size of the local economy. This is especially in light of differences which were previously identified between employment figures in the OPDC Socio-Economic Baseline and the Park Royal Atlas.

E.2 This note provides clarity on the differing data sources used in each of these reports, and provides advice on how to establish a consistent and definitive manner of reporting employment figures across the OPDC evidence bases.

Differences in Data Sources

E.3 There are a number of sources of intelligence on the size of the OPDC economy, including three different ONS datasets, and the Park Royal Atlas.

E.4 Crucially, the availability of different estimates of the size of the local economy have led to inconsistency within the OPDC evidence base: while employment figures provided in the Park Royal Atlas have previously been used by OPDC, the 2016 OPDC Socio-Economic Baseline (GLA Intelligence) uses ONS employment metrics.

E.5 A top level summary of the different sources for employment and business data is provided below.

Table 6.11 Employment Estimates for Old Oak and Park Royal

Source	Employment	Businesses
ONS BRES	52,300	N/A – employment intelligence only
ONS UK Business Count	N/A – business intelligence only	2,300
ONS Disclosive IDBR	43,100	1,700
Park Royal Atlas	31,000	1,900 *defined as non-vacant 'workplaces'

Source: OPDC Socio-Economic Baseline and Park Royal Atlas

E.6 The difference between the data sets can be attributed to:

- Differences in methodology used to collect the data.
- Differences in the geographies used for analysis.

E.7 Each of the sources is considered in more detail below.

Business Register and Employment Survey

Metrics provided:	Employment only
Geography of Analysis	Super output areas (local level statistical areas)
Trend analysis?	Yes – back to 2009
Sector analysis?	Yes – down to 5 Digit SIC (the most finite level of drill down possible)
OPDC Employment Figure	52,300

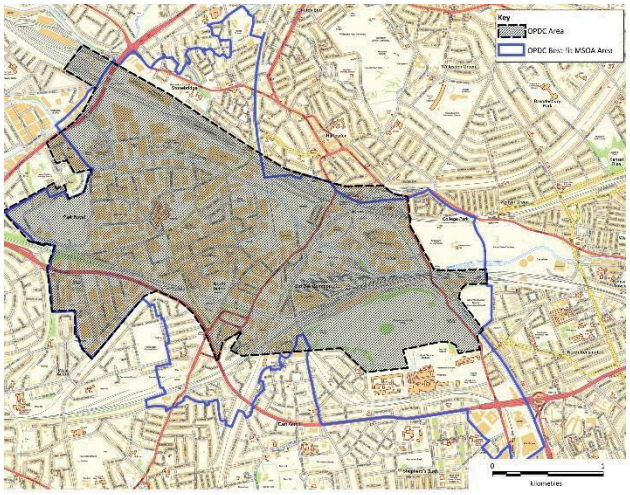
E.8 The ONS BRES is regarded as the definitive source of official government employee and employment statistics by GLA Economics and industry. It is a national survey of approximately 80,000 businesses, weighted to represent the economy covering all sectors.

E.9 Analysis is available at the local level and also at the detailed sector level. Trend information is also available back to 2009.

E.10 There are a few caveats to note with BRES. Although BRES is the standard dataset used for employment data, it is subject to sampling error, especially when looking at smaller geographical areas, such as the OPDC area.

E.11 In addition, BRES data is only available in specific geographies, and in the case of Old Oak and Park Royal, it is best accessed at middle-super output area (MSOA level). The preceding map shows the best fit MSOA statistical geography which was used in the Old Oak and Park Royal Socio-Economic Baseline. This shows that the statistical area for analysis does include some areas (and hence jobs) which are outside the official Old Oak and Park Royal area (including notable employment sites of Hammersmith Hospital and the former BBC Media Village).

Figure 6.6 OPDC Area (black) and Best Fit Statistical Area (Blue Line)



Source: Regeneris Consulting

UK Business Count

Metrics provided:	Businesses only
Geography of Analysis	Super output areas (local level statistical areas)
Trend analysis?	Yes – back to 2009
Sector analysis?	Yes – down to 5 Digit SIC (the most finite level of drill down possible)
OPDC Employment Figure	2,300

E.12 The ONS UK Business Count is regarded as the definitive source of official government information on the number of business units in a local area. Analysis is available at the local level and also at the detailed sector level. Trend information is also available back to 2010.

E.13 Unlike BRES, data is not survey based: data is based on aggregated information from the Inter Departmental Business Register (IDBR), which is in turn drawn from information from Companies House.

E.14 There are a number of caveats to the data:

- Like BRES, data is available at the MSOA level, so there are some minor inconsistencies between the statistical boundary for the OPDC area and the actual boundary.
- Information is not included on the very smallest businesses which fall below the VAT threshold (£80,000). As such, business numbers are likely to be slightly lower than is actually the case. This is less likely to be an issue in an area like OPDC, where most businesses are likely to be above the VAT threshold.

Disclosive IDBR Data

Metrics provided:	Business and Employment data
Geography of Analysis	Address Postcode level data
Trend analysis?	Yes, but separate applications required and difficult to track change accurately
Sector analysis?	Yes – down to 5 Digit SIC (the most finite level of drill down possible)
OPDC Business Figure	1,700
OPDC Employment Figure	43,100

E.15 The Disclosive IDBR Dataset is essentially a disaggregated version of the UK Business Count data which is drawn from Companies House. The data is highly disclosive and requires a license from ONS for its use.

E.16 Analysis is available at address / postcode level and also at the detailed sector level. While it is possible to get data for previous years, separate applications required and difficult to track change accurately

E.17 There are a number of caveats to the data:

- As with UK Business Count, information is not included on the very smallest businesses which fall below the VAT threshold (£80,000). As such, business numbers are likely to be slightly lower than is actually the case.
- Due to the disclosive nature of the data, a proportion of rows of information are also suppressed by ONS. As such, business numbers are typically lower than those provided by the UK Business Count.

Park Royal Atlas

Metrics provided:	Workplace and Employment data
Geography of Analysis	Postcode level data
Trend analysis?	No – one off data for 2014
Sector analysis?	Partly – data collected at broad sector level (16 sectors)
OPDC Business Figure	1,900 non-vacant workplaces
OPDC Employment Figure	31,000

E.18 The Park Royal Atlas is a detailed mapping of economic uses in Park Royal undertaken in 2014.

E.19 The Atlas' estimates are based on a survey which was carried out over 5 weeks in 2014, with 2,150 workplaces identified of which 1,900 were occupied. Of these businesses, 1,700 had the business name and activity identified.

E.20 The survey made an estimate of the size of employment within the business into four categories – micro (0-9 employees), small (10-49 employees), medium (50-249 employees), or large (250+ employees). This appears to have been made based on judgement from the survey team from their

observations, without any input from businesses. Following on from this, 245 businesses were interviewed (a sample of 14 per cent of all businesses identified), which obtained more detailed information on the number of employees as well as other business characteristics.

E.21 The benefits of this approach is that it is based on data that has been collected on the ground compared to the Baseline estimate which is based on a national survey. It provides more granular information on the different types of activities taking place in different areas of Park Royal.

E.22 However, there are a number of potential sources of error in this approach. The identification of businesses and the estimated number of employees could be incorrect, or underestimated the true number (especially in the case of larger businesses). Sampling error could also affect the results, as only 14 per cent of businesses were interviewed.

E.23 Crucially, the survey presents a snapshot of a single point in time – with no information on past trends available, and future updates dependant on commissioning additional research. The survey also does not allow performance to be benchmarked against other relevant areas.

So How Many Jobs and Businesses Are there in the OPDC Area?

E.24 It should be noted that there is no single definitive source of information on employment and businesses – as noted above, all the datasets are subject to caveats.

E.25 The sources assessed suggest:

- Employment estimates ranging from 31,000 jobs to 52,300 jobs. The Disclosive IDBR dataset figure (**43,100**) is likely to be closest to the true figure given it is based on the actual OPDC boundary and on non-survey information. That said, the actual figure is likely to be slightly higher given the fact that a small number of businesses are supressed for confidentiality purposes and the fact that it also excludes businesses below the VAT threshold.
- A business range of 1,700 to 2,300 businesses. The Disclosive IDBR dataset figure (**1,700**) is likely to be closest to the true figure given it is based on the actual OPDC boundary and on non-survey information. That said, the actual figure is likely to be slightly higher (perhaps closer to 2,000) given the fact that a small number of businesses are supressed for confidentiality purposes and the fact that it also excludes businesses below the VAT threshold.

Table 6.12 Employment Estimates for Old Oak and Park Royal

Source	Employment	Businesses
ONS BRES	52,300	N/A – employment intelligence only
ONS UK Business Count	N/A – business intelligence only	2,300
ONS Disclosive IDBR	43,100	1,700
Park Royal Atlas	31,000	1,900 *defined as non-vacant 'workplaces'

Appendix F - Sector Definitions

F.1 The following sector definitions have been used as part of our analysis. Whilst sectors can be interpreted in a number of different ways, these definitions analyse the sectors which are most relevant to Old Oak and Park Royal.

Table F.1 Sector Definitions

Sector	SIC No.	Sector Definition
Agriculture and Mining	01	Crop and animal production, hunting
	02	Forestry and logging
	03	Fishing and aquaculture
	05	Mining of coal and lignite
	06	Extraction of crude petroleum and natural gas
	07	Mining of metal ores
	08	Other mining and quarrying
	09	Mining support service activities
Manufacturing – Food	10	Manufacture of food products
	11	Manufacture of beverages
Manufacturing - General	12	Manufacture of tobacco products
	13	Manufacture of textiles
	15110	Tanning and dressing of leather
	16	Manufacture of wood and of products of wood and cork,
	17	Manufacture of paper and paper products
	18140	Binding and related services
	19	Manufacture of coke and refined petroleum products
	22	Manufacture of rubber and plastic products
	23	Manufacture of other non-metallic mineral products
	24	Manufacture of basic metals
	25	Manufacture of fabricated metal products, except machinery and equipment
	31	Manufacture of furniture
	32 (excl 32500)	Other manufacturing
Manufacturing - Creative and Media	14	Manufacture of wearing apparel
	15120	Manufacture of luggage, handbags and the like, saddlery and harness
	15200	Manufacture of footwear
	18 (excl 18140)	Printing and reproduction of recorded media
Manufacturing - Higher Tech	20	Manufacture of chemicals and chemical products
	21	Manufacture of basic pharmaceutical products and pharmaceutical preparations
	26	Manufacture of computer, electronic and optical products
	27	Manufacture of electrical equipment
	28	Manufacture of machinery and equipment
	29	Manufacture of motor vehicles, trailers and semi-trailers
	30	Manufacture of other transport equipment
	32500	Manufacture of medical and dental instruments
	33	Repair and installation of machinery and equipment
Utilities and waste - gas, water, electricity	35	Electricity, gas, steam and air conditioning supply
	36	Water collection, treatment and supply
	37	Sewerage
	38	Waste collection, treatment and disposal activities

	39	Remediation activities and other waste management services.
Construction	41	Construction of buildings
	42	Civil engineering
	43	Specialised construction activities
Retail	45 (excl 45310)	Wholesale and retail trade and repair of motor vehicles and motorcycles
	47	Retail trade, except of motor vehicles and motorcycles
Wholesale	46	Wholesale trade, except of motor vehicles and motorcycles
Transport	49	Land transport and transport via pipelines
	50	Water transport
	51	Air transport
	52212	Operation of rail passenger facilities at railway stations
	52213	Operation of bus and coach passenger facilities at bus and coach stations
	52219	Other service activities incidental to land transportation, nec (not including operation of rail freight terminals, passenger facilities at railway stations or passenger facilities at bus and coach stations)
	52220	Service activities incidental to water transportation
	52230	Service activities incidental to air transportation
	52290	Other transportation support activities
Warehousing and Logistics	52101	Operation of warehousing and storage facilities for water transport activities of division 50
	52102	Operation of warehousing and storage facilities for air transport activities of division 51
	52103	Operation of warehousing and storage facilities for land transport activities of division 49
	52211	Operation of rail freight terminals
	52241	Cargo handling for water transport activities of division 50
	52242	Cargo handling for air transport activities of division 51
	52243	Cargo handling for land transport activities of division 49
	53100	Postal activities under universal service obligation
	53201	Licensed Carriers
	53202	Unlicensed Carriers
Hospitality, Leisure and Recreation	55	Accommodation
	56	Food and beverage service activities
	92	Gambling and betting activities
	93	Sports activities and amusement and recreation activities
	94	Activities of membership organisations
ICT, Media and Creative Activities	58	Publishing activities
	59	Motion picture, video and television programme production, sound recording and music publishing activities
	60	Programming and broadcasting activities
	61	Telecommunications
	62	Computer programming, consultancy and related activities
	63	Information service activities
	71111	Architectural activities
	71112	Urban planning and landscape architectural activities
	78101	Motion picture, television and other theatrical casting
	90	Creative, arts and entertainment activities
	95110	Repair of computers and peripheral equipment
	95120	Repair of communication equipment
Financial and Professional Services	64	Financial service activities, except insurance and pension funding
	65	Insurance, reinsurance and pension funding, except compulsory social security
	66	Activities auxiliary to financial services and insurance activities

	68	Real estate activities
	69	Legal and accounting activities
	70	Activities of head offices; management consultancy activities
	71121	Engineering design activities for industrial process and production
	71122	Engineering related scientific and technical consulting activities
	71129	Other engineering activities (not including engineering design for industrial process and production or engineering related scientific and technical consulting activities)
	71200	Technical testing and analysis
	72	Scientific research and development
	74	Other professional, scientific and technical activities
	75	Veterinary activities
	91	Libraries, archives, museums and other cultural activities
Other Services	77 (excl 77220, 77291)	Rental and leasing activities
	95	Repair of computers and personal and household goods
	96	Other personal service activities
	97	Activities of households as employers of domestic personnel
	98	Undifferentiated goods- and services-producing activities of private households for own use
Business Support Services	78 (excl 78101)	Employment activities
	79	Travel agency, tour operator and other reservation service and related activities
	80	Security and investigation activities
	81	Services to buildings and landscape activities
	82	Office administrative, office support and other business support activities
Public Admin, Education, Health	84	Public administration and defence; compulsory social security
	85	Education
	86	Human health activities
	87	Residential care activities
	88	Social work activities without accommodation

Source: HCA Employment Density Guide, 2015

Appendix G - Consultations Undertaken

Table G.1 Consultations Undertaken

Name	Title of Stakeholder	Organisation
Lori Hoinkes	Park Royal Business Manager	OPDC
Tom Cardis	Head of Planning Policy	OPDC
Lauren Laviniere	Senior Planning Officer	OPDC
Matthew Dibben	Head of Employment, Skills & Enterprise	LB Brent
Dale Thomson	Regeneration Manager	LB Brent
Henry Kennedy-Skipton	Head of Regeneration	LB Ealing
Sam Cuthbert	Planner	LB Ealing
Sally Agass	Head of Economic Development	LB Hammersmith & Fulham
Luke Ward	Interim Head of Growth Employment & Skills	West London Alliance
Andrew Dakers	Chief Executive	West London Business
Mike Hope	Economist	GLA Economics
Michelle Cuomo-Boorer	Head of Skills, Employment, Food & Business	GLA Growth and Enterprise
Jason Turner	Lead Consultant for Catalyst Study	Deloitte
Jane Milton	Food Industry Expert	Jane Milton Limited
Erin Walsh	Researcher	Future Cities Catapult
Gerard Burgess	Senior Strategic Planner	GLA
Simon Wyke	Environmental Goods and Services Lead	GLA
Richard Templar	Director of Innovation	Imperial College
Andrew Ward	Director of Corporate Relations	Brunel
Neil Impiazzi	Partnerships Development Manager	SEGRO
Elaine Rossall	Head of Research	Cushman and Wakefield
In addition, discussion was facilitated and feedback received as part of the OPDC Sector Study wider steering group meetings		



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