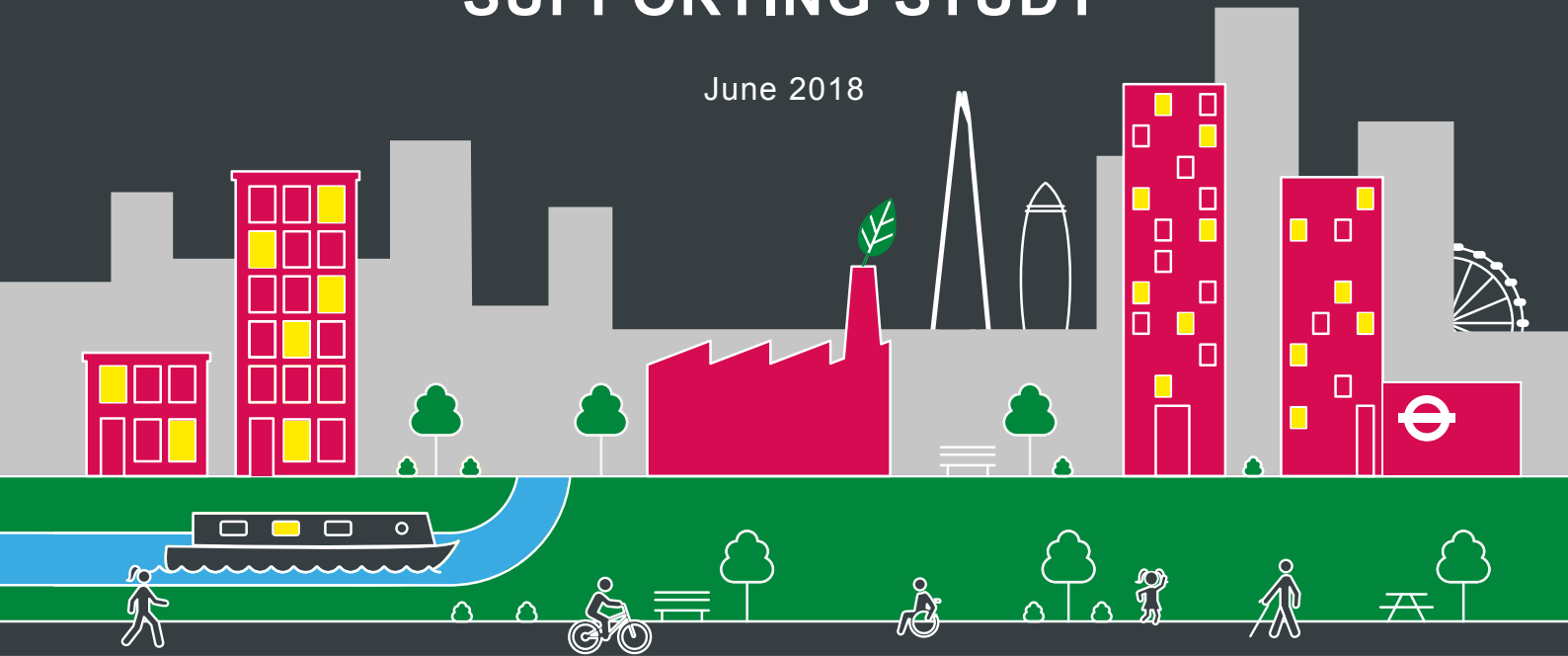


OPDC
OLD OAK AND
PARK ROYAL
DEVELOPMENT
CORPORATION

Catalyst Uses Study

LOCAL PLAN SUPPORTING STUDY

June 2018



MAYOR OF LONDON

7. Catalyst Uses Study

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|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Document Title | Catalyst Uses Study |
| Lead Author | Deloitte |
| Purpose of the Study | To identify uses which could be a catalyst for the regeneration of the area and to inform appropriate planning policy criteria to assess applications for catalyst uses. |
| Key outputs | <ul style="list-style-type: none"> • Define which uses could be considered catalyst uses for the OPDC area • Undertake a review of case studies to inform recommendations to OPDC and for the formulation of planning policy • Recommendations for planning criteria for inclusion in OPDC's Local Plan to assess proposals for catalyst uses. |
| Key recommendations | <ul style="list-style-type: none"> • Catalyst uses are likely to fall within four broad categories: <ul style="list-style-type: none"> - Sports stadia and facilities; - Retail and leisure; - Culture, education and health; or - Business and conference space. • Catalyst uses could be small or large, but OPDC should look to set a threshold for the application of planning policy criteria of either in excess of 10,000sqm and/or 0.25 hectares of land • The review of case studies identifies both positives and negatives for catalyst uses. The study identifies that rather than one catalyst, a series of multiple, complementary catalysts are likely to best support the wider regeneration aspirations of the area. • The study identifies a series of planning criteria against which applications should be assessed. These are structured around five overarching objectives for any catalyst: <ul style="list-style-type: none"> - To be part of a holistic offer; - To be financially sustainable; - To complement the wider environment; - To help generate momentum; and - To leverage HS2 and Crossrail. |
| Key changes made since Reg 19 (1) | N/A |
| Relationship to other studies | Outputs cross-relate to the Retail and Leisure Needs Study, Cultural Principles and Precedents Study. |
| Relevant Local Plan Policies and Chapters | <ul style="list-style-type: none"> • Strategic Policies SP1 (Catalyst for Growth) and SP6 (Places and Destinations) • Town Centre and Community Uses policy TCC8 (Catalyst Uses) |



Catalyst Uses Study

April 2017

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Executive Summary

OPDC has the task of delivering a minimum 25,500 homes and 65,000 jobs in the Old Oak and Park Royal area. Set up as a MDC and with planning authority powers it has the opportunity to work alongside existing land owners and occupiers and lead on the regeneration of the area and the planned new city quarter at Old Oak, centred around the new HS2, Crossrail and National Rail station at Old Oak Common.

As part of its strategy and vision formation and in recognition of the embryonic stage that the OPDC area, as a destination is currently in, OPDC has commissioned this piece of work to examine potential catalyst uses that could be incorporated into the site. As defined within The Old Oak and Park Royal Opportunity Area Planning Framework and Draft Local Plan catalyst uses are uses which can stimulate significant and positive change. Through this piece of work the organisation is aiming to answer two inter-linked questions related to the definition stated in the Draft Local Plan. Firstly what categories of catalyst uses would be appropriate within the OPDC area (relevant to future masterplanning and land allocations) and secondly how would it assess potential catalyst use planning applications coming forward i.e. what primary objectives does it fulfil.

From an initial long list of comparable regeneration developments which include major catalysts as a key component of the scheme, Deloitte agreed to review 13 catalyst case studies. The selection was guided by the following four unique use categories, sport stadia; retail and leisure; culture, health and education; and business and conference space. Our case study research comprised a combination of secondary research, economic analysis as well as discussions with developers who have been involved in the case studies to help form our views. From our research into the case studies very few of the catalysts/occupiers had actually been planned for. In many instances, the selection of the catalyst, and its success, has been fortuitous and as a result of external factors such as politics and economic conditions. Subsequently our report does not stipulate the most suitable list of catalyst uses and purely provides a guide of indicative catalysts; as catalysts will evolve over time. What our report does represent however is the first stage in providing a framework to assess appropriate categories of catalysts which support OPDC's core ambition for the delivery of jobs and homes, alongside achieving strong economic growth and wider regeneration at OO. The boxes Below provides a snapshot view of our findings for each category reviewed.

Sport Stadia

The sports stadia case studies are characterised as having high land take, high infrastructure costs, and high upfront and on-going estate management costs. Whilst they exhibit the ability to support high levels of GVA, the job density it provides is seen to be significantly less compared to the other use categories. The key issue for stadia is the ongoing challenge to prevent the emergence of inactive space on non-match days. This is evidenced from the fact that the stadia reviewed had an average of 31 days of use per annum.

Education, Health and Culture

The education, health and culture use class was seen to have the highest build costs of the four use categories considered, although it also presents an opportunity for the smallest potential land take. The direct GVA was regarded as being largely lower than the other uses stemming from the sector's low-to-average per worker productivity, however, it does provide key sector jobs and the ability to connect with wider industry to encourage complimentary uses. The place making characteristics of the category has assisted in the creation of a positive identity and animation on a full time basis.

Retail and Leisure

The retail and leisure category realised positive contributions in the form of place making, footfall, animation and local participation. It also provides a high number of jobs generating a substantial GVA figure which accords with the labour intensive nature of the industry. Despite these positive connotations the establishment of a catalyst in this use class at OO would need to be approached from a supply and demand perspective owing to the existing retail and leisure offering in London – most notably Westfield and Wembley.

Business and Conference Space

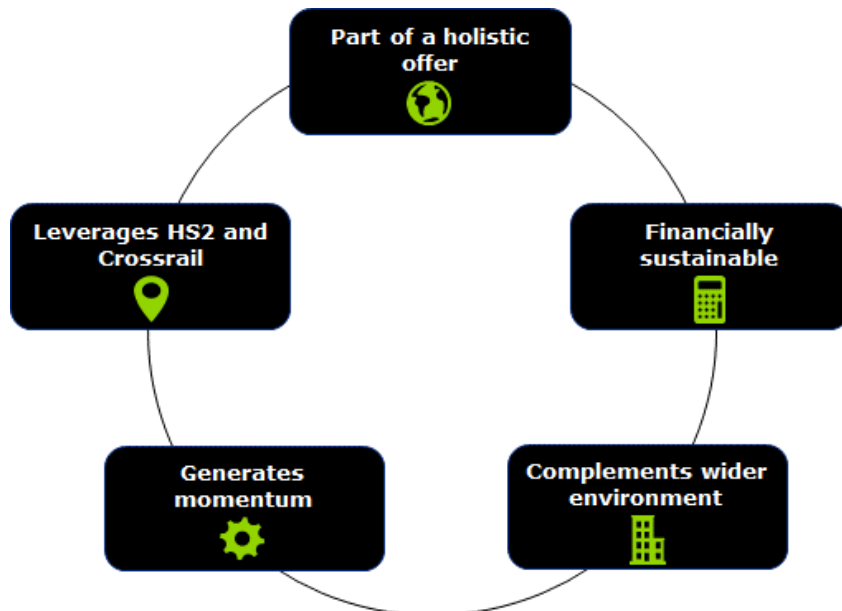
The business and conference space category provides high economic outputs of GVA although was observed to provide fewer direct jobs than the other sectors due to the higher productivity per worker. The catalyst’s economic benefits are also complemented by a number of positive spillovers including steady footfall during working hours and encouraging the agglomeration of specific sector activity.

Summary of Use Category Findings

Following the research into each of the case studies a long list of planning criteria was developed in consultation with OPDC officers with the aim of helping to identify suitable types of catalyst uses. This list was consolidated and refined via grouping into a short list with the ability to be used as a means of measuring proposed catalyst uses to demonstrate their performance.

This list was scrutinised at a Deloitte led Visioning Workshop where the overarching strategic objectives for potential catalysts were also developed. Five strategic objectives were also established to act as a second screening process that each proposed catalyst must pass to align with OPDC’s core objectives.

Strategic Objectives for OPDC Catalyst



There is an argument to suggest that the OPDC area already has its biggest catalyst use being proposed through the planned Crossrail and HS2 station. Building on this however we do not believe that a single catalyst use will meet the needs of the overall area. The scale of the opportunity will allow differing character areas to be developed, alongside a combination of catalyst uses which will also ensure a wide mix of demographics are targeted. It is also essential

that the catalysts delivered help drive the delivery of jobs and homes. This is critical especially in the early stages of regeneration in helping to create identity, public realm and a brand for the new neighbourhood.

Whilst there is a need for a structured plan for the introduction of catalyst uses in order to steer the Local Plan and Masterplan, flexibility should be promoted and maintained in light of the changing market conditions and emergence of character areas. From our experiences and lessons learnt on major regeneration projects, throughout the delivery of the masterplan some proposed catalyst uses will fall away and other new opportunities will arise – this is evidenced by Argent when the evolution of Kings Cross was discussed, they stated that “the next building built was never the next building planned for” highlighting that their development was opportunity driven but supported by a masterplan which allowed for change. We therefore fully envisage that the masterplan will evolve over time and will grow and change as the OPDC area is developed and new opportunities are identified. The emphasis on the first masterplan will be to allow for a good degree of flexibility.

The catalysts have the capability of forming a significant part of this development project and political support might be required in order to facilitate development. The wider impacts in terms of the catalyst being valued at both a local and regional level will therefore be important. Assuming the successful delivery of a catalyst, its potential risk of failure should not be ignored, for example if a catalyst is not as profitable as envisaged or if it does not work within the realms of the wider scheme. In such circumstances the delivered structure should be capable of being adapted to an alternative use, as illustrated in the O2 and Olympic Stadium case studies. The ownership of the land that a catalyst is delivered on will also be influential in determining OPDC’s ability to take control or take possession of a building should it fail.

It is essential that broad typologies of potential catalyst uses are factored into the masterplanning process by OPDC’s land and design team and that OPDC’s planning team ensure a tight and robust set of criteria are adopted within the Local Plan. The analysis contained within this study should consequently be reviewed to consider the key benefits each use could potentially deliver.

1 Introduction

1.1 Purpose of Study

The purpose of this study is to review catalyst uses through numerous national and international case studies that may be appropriate within the OPDC area. The study considers the potential economic benefits and wider positive and negative attributes of each case study and their potential impact within the OPDC area. This will enable OPDC to consider appropriate catalyst uses from around the world that might be suitable and to understand how they could contribute to development and regeneration.

It is envisaged that this report will play two main roles. The first is to help inform planning policy to enable OPDC to create a performance assessment for future potential catalyst use applications, ensuring that potential future uses are supportive of OPDC's core objectives. The second is to feed into the masterplanning process and provide the masterplanning team with research to help create new neighbourhoods and communities with the flexibility to accommodate a variety of catalyst uses (large and small).

The case study analysis, workshop with OPDC, and meetings with external experts helped us form the strategic aims for OPDC regarding catalyst uses and has framed the planning objectives for the catalysts to be assessed against. It also provides a framework in order to analyse the most desirable catalyst or combination of catalysts.

While this report seeks to draw out the lessons learnt from the case studies, the analysis is retrospective making it difficult to determine how much of the outputs were in fact planned for at their inception. In many instances (not all) and having engaged with developers from large schemes where there have been catalyst uses; success has been a result of fortuitous circumstances which were driven by politics, economic conditions or other external influences. It will be nearly impossible for OPDC to determine exactly what uses it deems to be catalysts and indeed what catalyst opportunities that may arrive in the future. However, this report is the first stage in providing a framework to assess appropriate categories of catalysts (or combination of catalysts) which support OPDC's core ambition for the delivery of jobs and homes, alongside achieving strong economic growth and wider regeneration in the OPDC area.

1.2 Planning Policy Context

The Old Oak Opportunity Area Planning Framework ('OAPF') and Draft Local Plan define catalyst uses as those which can stimulate significant and positive change. Catalyst uses have the potential to support the growth of Old Oak as a vibrant London destination, supporting the creation of a sense of place, providing a focus for early development and acting as an attraction drawing people into an area. The catalyst should help Old Oak become a recognised and successful part of London where people want to live, work, visit and play.

It recognises that catalyst uses can be small, medium or large in scale. Small and medium sized catalyst uses would need to be located in town centres and be integrated as part of mixed use developments whilst large scale catalysts would need to generate vibrancy and support placemaking, be compatible with surrounding development and support the delivery of homes and jobs.

A planning threshold is also envisaged such that applications providing above 10,000sqm of non residential floorspace or occupying in excess of 0.25 hectares will be assessed against the relevant planning criteria and strategic aims discussed later in this paper. Whilst this threshold appears low it is being used in the context of reviewing catalysts in mixed use developments. The planning objectives have not been created utilising every type of catalyst use which could be put forward, however they set a framework for the desired outcomes for catalyst uses in general. As a result, in the event that a proposal is put forward which sits clearly outside of the catalysts reviewed, the

impetus will be on the Applicant to provide benchmarking data to help OPDC form its view against the short listed objectives.

1.3 Scope of Work

The below points outline our scope of work for this study.

- What objectives are OPDC trying to achieve through the inclusion of catalyst uses within the scheme? What criteria should potential catalyst uses be assessed against?
- What evidence is available to show the potential impact of the catalyst uses in development and regeneration? Where are the examples of best (and poor) practice in the UK and globally?
- What is the longlist of potential catalyst sectors for Old Oak? What operators are known to have live requirements in these markets?
- How does the longlist of catalyst use sectors perform against agreed criteria? Which options should be taken forward for further analysis?
- What economic benefits and impacts would each use be likely to deliver, at a high level?
- Given the outcomes of the analysis, what strategy and tactics might OPDC adopt in its position as a land owner and planning authority in relation to catalyst uses (both known and potential)? For example there may be circumstances where a use proposed by a third party is deemed acceptable in planning policy terms, but that this use or solution may not be the optimal one that OPDC would seek to take forward as a landowner.

1.4 Methodology

We have undertaken the following steps to help determine that the most appropriate case studies are analysed from around the world. A process was put in place to ensure robust and meaningful strategic aims were identified and could be applied to a wide range of catalysts as follows:

- **Confirmation of case study comparables** – We undertook a process, alongside OPDC, to identify a list of case studies from around the world which were deemed to be the most comparable and relevant examples of catalysts to OO. It was essential to consider a broad range of catalysts and to consider examples where there might be valuable lessons to learn.
- **Review of case study comparables** – Following research into each of the case studies, by reviewing statistics, online articles and accounts, we were able to consider the case studies in more detail and how they compare to one another.
- **Planning Criteria** – After reviewing all of the catalyst case studies and in particular how they performed, we came up with a long list of planning criteria that we considered appropriate to help OPDC identify suitable types of catalyst uses. The list was consolidated into a 'short list' by grouping together themes.
- **Visioning Workshop** - The visioning workshop was set up to review and align the long-list of planning criteria and their importance to OPDC to then determine a set of strategic aims that are essential to OPDC and that every catalyst should satisfy.
- **Conclusion** – The conclusion of this report reviews the scoring criteria and how certain use categories perform against each other and provides our recommendation into risks, timing, masterplanning and quantum of catalyst uses.

2 Case Study Overview and Use Category Summary

2.1 Case Study Introduction

The case study analysis reviews a set of comparable regeneration developments that have included major catalysts as a key component of the scheme. The purpose of this analysis is to provide OPDC with a contextual understanding of: (1) the different types of catalysts that have been used in comparable regeneration developments; (2) the merits of each type of catalyst use; and, (3) specific considerations that should be made by each use category to ensure a catalyst is effective.

Stemming from an initial long list of schemes, which considered national and international projects of similar size and scale, Deloitte agreed with OPDC to undertake detailed analysis of a shortlist of 13 catalyst case studies. The selection of case studies was guided by four unique use categories, for which OPDC wanted to understand key learning points from, to help inform the creation of a criteria to assess future proposals against. These categories consisted of: **sport stadia; retail and leisure; culture, health and education; and business and conference space**. Each case study provides information on key characteristics (size, location and enabling development) as part of the key learning points to seek to identify common success criteria.

When reviewing the individual case studies below it should be acknowledged that more than one catalyst at OO might be appropriate. This is due to the scale of the opportunity and the impetus to generate momentum with different character areas across the masterplan.

2.2 Case Study Table Matrix

This section presents summarised analysis of the individual case studies according to the four use categories by which they have been categorised. Headline metrics for comparison are provided for each case study, followed by a summary of key learning points, which are distinct to each catalyst, and points of relevance to OO.

2.2.1 Sport Stadia

The case studies selected as part of the sport stadia use category include Wembley, Northwest London; Etihad, Manchester; and the Olympic Stadium, East London. These case studies were selected in order to demonstrate the catalytic effects of a stadium which is part of a much larger regeneration scheme (Wembley within the wider Wembley Calling regeneration vision from Brent County Council, Etihad within SportCity, and the Olympic Stadium within the Olympic Park). Our focus on sport stadia derives from our interpretation of sporting catalyst uses. For the purposes of this study we have categorised 'sporting uses' as large scale, land hungry developments (such as football and athletics stadiums) which are specific in use and generally difficult to integrate into the community. Small and medium sized sporting catalysts (for example a leisure centre or small scale leisure activity experience e.g. climbing wall or sky diving simulator) would have the ability to be supported in town centre locations and would therefore be more closely aligned to the retail and leisure use category and contribute to neighbourhood placemaking.

Figure 1: Headline metrics from Sport Stadia use category case studies

| | Wembley | Etihad | Olympic Stadium |
|----------------------------------------------------|---------|--------|-----------------|
| General Demographics | | | |
| Land Take (acres) | 25 | 16 | 26 |
| Land Take Excl. Circulation & Egress Space (acres) | 14 | 9 | 15 |

| | | | |
|----------------------------------------|----------------------------------|----------------------------|-----------------------------|
| Build Costs | £750m | £112m £42m (Conversion) | £429m £272m (Conversion) |
| Gross Direct Jobs | 366 | 320 | 720 (Olympic Stadium) |
| Build cost per gross direct job | £2,050,000 | £350,000 | £600,000 |
| Gross Direct Annual GVA | £7.8m | £236m | £91m |
| GVA Calculation Source | Productivity per worker estimate | MCFC Annual Report | WHUFC Annual Report |
| Sector Demographics | | | |
| Number of Sporting Events per annum | 35 | 34 | 25 |
| Annual Visitors | 2m | 1.15m | N/A |

Source: Deloitte. Note that gross direct jobs reflect ongoing operational jobs. Transitory construction jobs are not included.

2.2.1.1 Wembley

The National Stadium plays an important role locally, regionally, nationally and in an international context. It is a major venue for world class events which attracts millions of visitors each year outside of its core sporting use and is an iconic landmark, a large employer and a significant revenue generator for current and future local businesses. Despite the presence of the sporting use already on the site in the form of the Original Wembley Stadium, it was the new stadium that provided impetus for wider change. The three distinct takeaways from new Wembley are as follows:

- **Establishment of global identity:** The impetus provided by the Stadium has provided a shift in perceptions of Wembley into a global brand worthy of substantial investment. It is deemed to be the home of football but has leveraged on its status to host concerts and other major sporting events.
- **Accessibility & Infrastructure:** Public transport to the stadium was developed with the intention of supporting sustainable travel and Wembley had a partnership with TfL and the GLA to facilitate the investment into infrastructure. Despite this there is still a need for transport links to be integrated and the train service from Marylebone to Wembley national rail station remains an issue with only 1 train every half hour. The road network was also not upgraded at the same time as the stadium and traffic patterns continue to hinder match day traffic.
- **Destination Creation:** A key challenge has been to transform Wembley from a place users frequent only on match days to one where there are higher levels of animation and a broadening of visitor offerings. The development of the London Designer Outlet as well as the improvement of Wembley Arena has also contributed to the footfall both day and night.

Wider Regeneration Creation: In 2004 the London Borough of Brent granted outline planning permission to Quintain (the developer) for a major mixed-use regeneration scheme covering 42 acres of land around Wembley stadium, alongside the refurbishment of Wembley Arena (2006) and construction of the London Designer Outlet (2013). It is evident that the area was forged by Wembley Arena and the new stadium crystallised the regeneration of the wider Wembley Park. As Quintain seeks to progress regeneration proposals, there are clear design challenges emerging when seeking to integrate high density residential uses alongside the football stadium. The principle design challenge is the lack of permeability through the site and the large land take requirement for emergency egress and circulation space around the stadium; contributing little, other than on match days.

Relevance to OPDC:

- The case of Wembley illustrates the power that the brand-recognition of a stadium such as this can have on repositioning a location on the map. This is an important objective of any catalyst in the OPDC area, given that the area is not currently well-known at the London or UK level.
- This case study also illustrates the challenge of making this type of catalyst a year-round visitor destination and the issues associated with incorporating it within a masterplan and linking it up with the surrounding infrastructure and broader regeneration. There is a negative connotation between stadia and housing with concerns over crowds and traffic impacting on the desirability for housing in the immediate area. The requirement for external concourse to aid safety, security and egress adds further to the land take of the development and creates additional challenges to prevent dead space on non-matchdays. On the positive side it has promoted tourism and hotel and retail uses.
- This case study has illustrated that more than one catalyst at Wembley, the London Designer Outlet and refurbishment of Wembley Arena, has helped increase the number of visitors to the area, which is essential as the stadium itself is only used for 35 events per annum. The result of its low use is a low level of direct jobs particularly given the scale of the land required.
- Careful consideration as to the location of a stadia and controlling the access and flow of people and traffic on days when it is used is a key masterplanning consideration. Planned new stadiums should ensure that the surrounding uses are complimentary and wider regeneration objectives are protected. Key to this will be phasing. The early delivery of a stadium would imprint this use on the overall site and therefore have implications for subsequent development.

2.2.1.2 Etihad

The City of Manchester stadium (otherwise known as the Etihad Stadium following a 10 year sponsorship deal made in 2011) is home to Manchester City Football Club (MCFC). It forms the centre piece of SportCity which comprises other sporting facilities developed for the 2002 Manchester Commonwealth Games and is recognised as a major factor that has contributed to the broader development and regeneration in East Manchester (Eastlands) over the last decade. The three distinct lessons learnt from Etihad are as follows:

- **Social infrastructure as a catalyst:** The attraction of MCFC to the stadium has been critical for the credibility of the ongoing use of facilities developed for the Commonwealth Games and growing the reputation of the sports sector in Manchester. The Club can be regarded as having set an example for other Premiership Football Clubs and other professional sports bodies elsewhere in the UK to become involved in transforming their communities. It has served as an anchor which is helping to fuel the next wave of commercial and residential development in Eastlands.
- **Delivery:** A strong partnership has been established between the Club, the City Council and key delivery agencies that has lasted over many years. Financially, the City of Manchester has needed to invest heavily in the stadium to see it delivered and adapted for football use. The significant cost of public transport improvements has also largely been funded through public sector borrowing. It is important to note that the delivery has been achieved through strong civil leadership.
- **Destination Creation:** With over 1.15 million visits per year, MCFC has an important role in attracting football to the area, albeit on a very periodic basis. The regeneration potential of the stadium can only be fully realised by making it a destination in its own right within Manchester – a strategic, complex and long term task. The ongoing challenge remains in encouraging use on non-match days throughout the year. As this study highlights this is a crucial issue facing all three of the sport stadia case studies analysed.

Wider Regeneration Creation: Alongside building the stadium for the 2002 Commonwealth Games the wider area known as SportCity was also developed, which spurred considerable regeneration on former vacant and under-utilised industrial land. In 2011 the Eastlands Development Partnership was created to ensure continuous regeneration of the area and over the next 15 years is expected to secure over £2bn in public and private funding due to the momentum gained from SportCity and principally the Etihad Stadium.

Relevance to OPDC:

- The City of Manchester Stadium (the Etihad) provides an insightful example of stadium led regeneration outside of London. The Etihad, similar to the OPDC area, forms part of a large regeneration scheme, and highlights the benefits that can result from a joined up approach between all stakeholders in the delivery of a mixed use development with a stadium at its core. The wider SportCity development, comprising varied sports venues, helps to activate the immediate surrounding area when the stadium is not being used, therefore, the SportCity development comprises multiple catalysts and highlights to OPDC the fact that a football stadium as a single catalyst has limited benefit against OPDC’s objectives.
- The presence of a football club has illustrated the economic potential in terms of gross value-add (GVA) that the inclusion of a tenanted football stadium could bring to OO. However with an important objective being local benefit retention, local spend would need to be considered on a case by case basis.
- Unlike Wembley, the Etihad stadium is home to a football club. In terms of social benefit this is significant, as the club will have greater social responsibility and funding to be able to spend on the local community. In terms of modern football, brand and reputation is key. Despite this the challenge remains in how to best utilise the hard landscaped circulation space around the perimeter of the stadium on non matchdays.

2.2.1.3 Olympic Stadium

The Olympic Stadium hosted the Athletics at the London Olympic Games in 2012 and is noted as the most recognisable venue in the Olympic Park, Stratford. It was originally designed with a capacity of 80,000 seats, but since the games, the stadium has been redesigned to hold 54,000 seats and will be the new home to West Ham FC. It should be noted that the Olympic stadium is one of several major iconic new sporting arenas on the Olympic Park. A number of different catalyst uses have been promoted simultaneously on the Queen Elizabeth Olympic Park, providing a wide range of sporting, educational and employment opportunities (alongside predominately residential development and the adjacent Westfield shopping centre). The three distinct lessons learnt from the Olympic Stadium are as follows:

- **Long term value creation:** The Olympic Stadium will be taken over by West Ham United in 2016. Once in operation at the new site, West Ham FC expects to create 720 jobs at the Olympic Stadium, with 75% of these roles going to residents of Newham. The stadium will retain an athletics track and will host other athletics based events, however its predominant use will be football. The London Assembly recognises the benefit of the Stadium being occupied by the football club to maximise footfall and deliver a return for public sector investments. There are also a range of other projects and well considered initiatives underway to ensure that the local community has access to, and can benefit from, long-term investment on the park.
- **Build Cost:** The Olympic Stadium has been very costly to build, convert and retain. However it does ensure a long-term athletics and football legacy is retained on the park.
- **Design & Iconic Features:** The stadium was designed by Populous and is a landmark building on the Queen Elizabeth Olympic Park. It was designed with legacy in mind given the ambition for a reduced capacity post the games. Various green features were also pursued in the construction of the Stadium to include a fabric roof, lightweight steel and rainwater collection. Since the stadium re-opened in April 2013, there have been 3 million visitors making it one of London’s most popular free attractions.

Wider Regeneration Creation: Similar to the Etihad Stadium the Olympic Stadium was built for an international sporting event, the 2012 Olympics, and is positioned as a centrepiece of the Olympic Park. Therefore, the Stadium and neighbouring venues initially contributed to the surrounding regeneration, however, since the games, considerable investment and residential development have been undertaken on the Olympic Park with the latest phase being Olympicopolis (a mixed use cultural and residential quarter). Since the games there has also been considerable private sector development and investment into both residential and commercial uses across the surrounding neighbourhoods.

Relevance to OPDC:

- It is difficult to separate out the regenerative benefit of the stadium alone as it is set in the context of other major sporting venues including the Velodrome and the Aquatics Centre together with the setting of large open park space. The case of the Olympic Stadium in isolation highlights the power that landmark buildings can have in cementing a location on the map.
- The Olympic Stadium has acted as an anchor for the ongoing redevelopment of East London following London 2012, with other catalyst uses having been promoted on the back of the initial investment of the stadia (and infrastructure), designed with legacy in mind. Given that OPDC will require a catalyst that maintains a high level of animation and attracts visitors on non-match days the case of the Olympic Stadium provides a relevant and recent example of various initiatives to maximise football and promote local community involvement. Of the three stadia reviewed the Olympic Stadium does however have the greatest land take and a catalyst of this size would take up approximately a quarter of land were it to be provided within the developable area at Old Oak. Consequently it would need to ensure it does not compromise the delivery of jobs and homes.

2.2.2 Education, Health and Culture

The case studies selected as part of the Education, Health and Culture use category include University of the Arts, London; The Francis Crick Institute, London; Tate Modern, London; and Olympicopolis, East London. The case studies selected demonstrate a spread of recent major catalysts situated in London in which education, health and culture uses are at the forefront of the development. Whilst Deloitte and OPDC considered looking at other international examples it was considered that the selected case studies were the best and most relevant for the site at OO.

Figure 2: Headline metrics from Education, Health and Culture use category case studies

| | UAL | Crick Institute | Tate Modern | Olympicopolis |
|-----------------------------|----------------------------------|----------------------------------|----------------------------------------------------------------------|------------------------------------------------|
| General Demographics | | | | |
| Land Take (acres) | 4 | 4 | 8 | 53 |
| Build Costs | £109m | £541m | £134m (Conversion) £260m Extension | £1.3bn |
| Gross Direct Jobs | 1,150 | 1,500 | 500 | 3,000 (Direct & Indirect) |
| Gross Annual Direct GVA | £15.2m | £74m | £100m (Direct & Indirect) | £2.8bn (Direct & Indirect) |
| GVA Calculation Source | Productivity per worker estimate | Productivity per worker estimate | Value of the creative industries & culture, Arts and Business (2007) | Outline Business Case, The Guardian (Nov 2015) |
| Sector Demographics | | | | |
| Annual Visitors | 4,672 (Students) | N/A | 5.7m | 1.5m |

Source: Deloitte

2.2.2.1 University of the Arts London

The Central Saint Martins UAL building is positioned in the heart of the King's Cross development scheme. The UAL site totals 325,000 sq ft (NIA) and provides a mixture of uses including office space, university accommodation and quasi-public space, which accommodates 5,000 students and staff. UAL's purchase of the long leasehold interest of the Granary Building, was seen as the catalyst for further development and investment in King's Cross and encouraged other large brands to commit to the scheme.

It was never specifically planned for UAL to be the occupier at the outset. Argent had a specific focus on what the activities would contribute such as place making and animation at different times of the day rather than named occupiers and assessed tenants on this basis. Furthermore, the challenging market conditions at the time played a significant role in helping UAL to compete with offices uses. The flexible masterplan adopted by Argent together with their ability to assess the type of tenant it was looking for allowed UAL to take a dominant space while being supportive of employment space surrounding it. The three distinct takeaways from the UAL Building are as follows:

- **Placemaking Impact:** The early delivery of a catalyst use can be fundamental in reshaping perceptions and creating a new and distinctive identity for an area. This has certainly been the case at Kings Cross where the demographic associated with the university has provided positive associations in terms of vibrancy, youth, creativity and diversity.
- **Unlocking Value:** A comprehensive approach to value creation can lead to successful decisions which may not otherwise be considered to be maximising profit. Whilst UAL secured the Granary Building for a low capital sum, it is viewed by Argent as having unlocked a lot of value in the wider project. The decision to include UAL within the scheme was an important part of a wide-ranging approach to create identity, placemaking and include interesting interim uses and the early delivery of high quality public realm. On the 3.6 acre plot, UAL now has over 1,000 full time employees, almost 5,000 students, delivering circa £15m of GVA and £17m student expenditure annually. The existence of UAL within the scheme has helped attract the likes of Google, Louis Vuitton and Universal Music to the scheme – demonstrating the catalytic impact of their presence and the environment which it has created.
- **Identity of Sector:** The selection of a catalyst use in a particular sector, in this case the creative sector, can play an important part in helping to form an identity and to convince employers and retailers to locate within the scheme.

Wider Regeneration Creation: UAL's purchase of the long leasehold interest of the Granary Building, was seen as the catalyst for further development and investment in King's Cross and encouraged other large brands to commit to the scheme. Argent appreciated the impact UAL could have on the area and realised it would form a credible and successful catalyst to help stimulate infrastructure, public realm, animation and forge identity and a new community.

Relevance to OPDC:

- The case of UAL is widely recognised as being the catalyst for further development and investment at Kings Cross. The fact that the building was sold for a low value use by the developer is indicative of their belief in UAL's presence within the scheme. The example illustrates the fact that in some instances a lower value land use can be beneficial in unlocking value in the wider development in helping to instil momentum. It also presents an opportunity for OPDC to incorporate a catalyst with a small land take compared to the other use categories and promote potential synergistic or complementary uses.
- The use of education, subject to attracting the right type of university and the right scale of buildings, helps to promote placemaking and provides much needed day time and night time activity and brings a vibrancy to the area. It also highlights the need for flexibility to be built into the masterplanning of the area to have a range of occupiers.
- On the social agenda, education uses add significant value to the local community, particularly if they are for additional students rather than displacing or relocating existing students. Universities run research and summer courses and are often interactive with the local community outside of term time.

2.2.2.2 Crick Institute

The Francis Crick Institute (the 'Crick Institute') is a biomedical research centre in the London Borough of Camden. The building totals 980,000 sq ft, comprising 1,553 rooms, 8,000 sq ft of high specification bio-containment laboratories and a 450 seat auditorium. The building is currently nearing practical completion, with researchers moving into the facility over the course of 2016 and the official opening to take place in the autumn. While the Crick in itself has not necessarily crystallised neighbouring development, it demonstrates how the Medical Research Council, Cancer Research UK, Wellcome Trust and three leading universities have come together to form a synergy within the building. Similar synergies of occupiers could be formed within the OPDC area, helping to create a brand and an area of excellence. The three distinct takeaways from the Crick Institute are as follows:

- **Design Merit:** The design of the institute has shown how a type of facility that is often associated with low density, out of town locations can be designed successfully within a much more urban environment. The design changes made as part of the consultation process should encourage the facility to be more accessible to the local community and ground floor activities being undertaken to be visible to the general public.
- **Delivery:** The Crick Institute was able to acquire the site from the landowner (British Library) on commercial terms, although the facility as a whole has received considerable public subsidy from central government, as well as considerable funding from charities.
- **Cluster Benefits:** This catalyst use provides an example of the opportunity to bring together the above three organisations and universities within a sector to create a cluster that has the potential to deliver large-scale social benefits. The facility consolidates researchers from existing facilities across London working within different organisations into a single building that is fit for purpose for today's medical research challenges. It also shows a commitment to build upon and enhance the UK and Camden's position as a key centre for medical research with UCL's medical school, Royal Free Hospital and St Pancras Hospital all within close proximity and linkages between them all.

Wider Regeneration Creation: Whilst the true impact of the institute is yet to be observed in practice, owing to its current construction status, the development has the intention to be the leading research facility of its kind in Europe. It is envisaged that the cluster benefits outlined above will continue to attract further biomedical companies to the immediate vicinity. With much of the land around St Pancras having been successfully transformed by Argent, the Crick seeks to reinvent the former redundant land to the east.

Relevance to OPDC:

- The Francis Crick Institute provides an illustration of how cluster benefits can be realised from attracting key organisations to a location as a result of an all-encompassing, well designed and high quality facility. The cluster impact is not necessarily unique to the medical research community, but true of most industries to varying degrees. There is further draw for this type of facility given the transport links to Heathrow and across London. The nature of such a facility supports a mix of small and medium sized enterprises to co-exist with larger organisations through agglomeration.
- The build costs for the provision of such a facility must not be understated with the Crick Institute requiring a considerable public subsidy.
- Similar to UAL the building requires a minimal land take, whilst also supporting a large number of jobs allowing OPDC's core objective for jobs and homes to be protected.

2.2.2.3 Tate Modern

The Tate Modern is a modern art gallery located in the Bankside area of London which holds the national collection of modern British art, as well as international modern and contemporary art.

The gallery opened in 2000 and was created from a disused power station in the heart of London. It has recently been expanded to deal with the increase in visitors and to redefine the museum for the twenty first century. The three distinct takeaways from the Tate Modern are as follows:

- **Identity and Destination Creation:** A catalyst use of international standing can support major change in the identity of an area, its relative desirability as a place for residents and business to locate and a wholesale re-rating of a local property market. Although the Tate Modern was located away from the existing Southbank cultural complex and accompanied tourist trails it has still become an internationally acclaimed gallery and has helped expand the pitch along to London Bridge. The historic and architectural interest of the building has also helped to transform its identity and create a piece of art within itself. The building's identity and publicity has been enhanced by a recent extension to increase the amount of exhibition space. Of the case studies reviewed within the Education, Health and Culture use category the Tate Modern also has the highest number of visitors per annum and represents a successful example of an attraction that is well used all year around and at all times of day.
- **Accessibility & Infrastructure:** A notable factor in the increase in footfall generated by the Tate Modern gallery is the Millennium Bridge that crosses the River Thames. This communication route connects the Tate Modern Gallery with St Paul's Cathedral in the City of London which offers close proximity to both a prime tourist area and the financial core of the city. A major success of the Tate Modern is the level to which it is integrated into the neighbourhood and has already contributed to the ongoing revitalisation of Southwark.
- **Local Community Engagement:** The Tate Modern has a very active programme to attract a broad range of visitors, from international tourists to local residents. It has a long history of working with local community groups and individuals living near to the gallery, collaborating on inspiring ways to learn about art mainly through projects with contemporary artists. The new Tate Modern extension is planning to have a space on the ground floor dedicated to hosting meetings, seminars and events with neighbours. There is a planned ongoing programme of new events organised in collaboration with local businesses, community organisations and residents.

Wider Regeneration Creation: Since the Tate Modern opened in 1990 it has contributed considerably to the wider economic regeneration and placemaking of the surrounding area. The regeneration shifted perceptions around the desirability of living and working around the Tate Modern and has consequently lead to increased private sector investment and increase in property prices.

Relevance to OPDC:

- With the help of Tate Modern the bankside area has been firmly put on the map and it continues to drive footfall at all times of year (as well as at all times of the day, every day) and attracts spending in the surrounding area.
- An important objective for OPDC is for high quality public realm and compatibility with surrounding uses, and it is clear that the Tate Modern provides a worthy example of this being achieved. While the OPDC area only has a few significant buildings of merit, the infrastructure and public realm will help to add value.
- Vital to its continued success has been the accessibility to the venue and positioning alongside the river within central London. This has helped achieve its identity and high visitor numbers. Therefore the positioning and accessibility of the catalyst will need to be a key objectives for any catalyst through the use of the Grand Union Canal.

2.2.2.4 Olympicopolis

Olympicopolis is the proposed concept to deliver a world-class higher education and cultural district at Stratford Waterfront within the Queen Elizabeth Olympic Park. It will also provide high quality public spaces and complementary residential and commercial uses. Overall, Olympicopolis

will deliver approximately 300,000 sq m of mixed use accommodation. The three distinct takeaways from Olympicopolis are as follows:

- **Vision:** The design proposals for Olympicopolis demonstrate the ability to integrate education and cultural catalyst uses within wider mixed-use development, including high density residential accommodation. The concept helps to fill a missing piece in the masterplan for the Olympic Park, which did not previously have a significant level of higher education and cultural floorspace proposed. This will help enhance placemaking at Stratford and reinforce the area as a destination.
- **Cluster Benefits:** The vision is for Olympicopolis to be a world-class destination for higher education and a driver of cultural value at both the international and local scale, with possible tenants including the University of Arts London, University College London and Sadler's Wells. The aim of Olympicopolis is to bring together activities from knowledge based sectors to create new opportunities for collaboration, knowledge creation, knowledge exchange, innovation and culture. This component of the legacy has yet to be developed, however impacts consistent with the 2014 Outline Business Case project that it will deliver 3,000 jobs and £2.8bn in GVA for Stratford and the surrounding economy.
- **Delivery:** There is a need to be flexible when promoting regeneration proposals and opportunities to incorporate catalyst uses. The land identified for Olympicopolis was previously intended to be used for a largely residential scheme. As the viability of the overall legacy project improved and masterplan proposals were reconsidered, the opportunity to bring forward Olympicopolis was able to be incorporated.

Wider Regeneration Creation: Olympicopolis will be developed towards the later stages of the Olympic Park's transformation post games, therefore a significant proportion of regeneration would have already been undertaken. In recognition of this, mayoral intervention helped to transform the original vision of the Olympic Park to focus on outcomes that benefit the community as a whole with the economic impact of Olympicopolis deemed to be more important than the immediate financial return. Despite this, the uses at Olympicopolis will help cement Stratford on the map and will create a new cultural quarter for London which will further enhance regeneration and private sector investment around Stratford.

Relevance to OPDC:

- Whilst Olympicopolis is yet to be developed it is a relevant and current example of a proposed new London concept in the planning stages with a vision of creating a world class cultural district.
- The concept for the agglomeration of museums, university colleges and performing arts venues is viewed as filling the missing piece of the masterplan for the Olympic Park; this ties in with the aim for a catalyst within the OPDC area to be part of a holistic offer.
- The build costs from the proposed Olympicopolis concept are higher than the other education, health and cultural use category examples reviewed – this is driven by the fact that it comprises of a cluster of buildings over a comparatively larger land take.
- Stratford already comprises numerous substantial catalyst uses (sports related) and there is still viewed to be demand and support for a cultural hub at the expense of valuable residential development. This highlights the point that more than one catalyst might be required within the OPDC area.
- Mayoral intervention helped facilitate the creation of the Olympicopolis concept. Olympicopolis did not act as an early stage catalyst but instead profited from the wider regeneration of the area and development post 2012.
- It should be noted that the majority of occupiers at Olympicopolis emerged in a natural process that started with UCL and the V&A being the anchors. During the inception phase a long list of occupiers were considered for the remaining space before the final list was agreed.

2.2.3 Retail and Leisure

The case studies selected as part of the retail and leisure use category include Wembley Designer Outlet, O2 Greenwich and Universal Studios in Singapore. The chosen case studies demonstrate the catalytic effects of venues which are focused on pure retail (Wembley Designer Outlet) as well as large leisure venues (Universal Studios Singapore and O2 Greenwich). Wembley Designer Outlet was chosen to depict a retail use which could be appropriate within the proposed designated major town centre at Old Oak; whilst a use the size of Westfield London was discounted due to exceeding the classification of a major town centre use. It also serves as an example of one of a few designer outlets in the South East of England. The O2 Greenwich was selected as it is a successful major event space in London and now regarded as the world's busiest music arena; whilst Universal Studios Singapore provides a global example of an internationally renowned movie theme park which has a small footprint and is situated outside of the main city centre.

Figure 3: Headline metrics from Retail and Leisure use category case studies

| | Wembley Designer Outlet | O2 Greenwich | Universal Studios Singapore |
|-----------------------------|----------------------------------|-------------------------------|-----------------------------|
| General Demographics | | | |
| Land Take (acres) | 7 | 34 | 49 |
| Build Costs | £65m | £350m (Conversion) | £520m |
| Gross Direct Jobs | 1,000 | 3,500 (Direct & Indirect) | 10,000 (Resort) |
| Gross Annual Direct GVA | £25m | £126m | Unknown |
| GVA Calculation Source | Productivity per worker estimate | AEG Estimate, Stadia Magazine | N/A |
| Sector Demographics | | | |
| Annual Visitors | 6m | 7.2m | 2m-3m |

Source: Deloitte

2.2.3.1 Wembley Designer Outlet

Quintain's London Designer Outlet, located directly opposite Wembley Stadium, opened in October 2013 and includes 70 shops, 15 cafes and restaurants and a 9 screen cinema and cost £65m to construct. It is London's first designer outlet and has attracted tenants that include M&S, Nike, Gap, Superdry and Clarkes. The three distinct takeaways from the Wembley Designer Outlet are as follows:

- **Destination Creation:** The new development at Wembley Park by Quintain has sought to broaden the visitor offer and provide reasons for more frequent trips from people within North and West London. The London Designer Outlet which is the London's first fashion outlet centre combining shopping with eating and entertainment, has brought about a decisive change and it now attracts 6 million visitors per year. This has transformed the footfall to Wembley from 'event based' to 'everyday' with millions of new visitors a year and provides local people with additional shopping choice and many new employment and training opportunities.
- **Benefit Retention:** The latest figures suggest that London Designer Outlet supports 1,000 jobs. Based on standard productivity ratios, the London Designer Outlet supports £25m GVA per annum. Although these employment and GVA figures do not account for leakage or displacement, 60% of the jobs at the Designer Outlet were taken up by local residents, suggesting that efforts have been made to retain benefits in the local area.
- **Retail Offering:** Despite positioning and having marketed itself as a high street and aspirational designer brand location, the majority of the retail signings have been to mainstream operators. The rental structure of the leases is based on a base rent plus a share of tenants' turnover which allows the landowner to share in the success and growth of the centre.

Wider Regeneration Creation: The designer outlet has helped activate Wembley year-round and has consequently encouraged wider regeneration particularly residential development, as the retail helps form a neighbourhood with amenities and services.

Relevance to OPDC:

- The case of Wembley Designer Outlet seeks to capitalise on both the lack of competing designer outlets in London as well as its proximity to an internationally renowned football stadium.
- The destination that has been created forms an all-encompassing shopping, eating and entertainment quarter. This drives regular footfall to the area and helps address the need for day time activity and an attraction year-round.
- Concerted efforts have been made for employment opportunities to be taken up by local residents. This should be an important target of any catalyst within the OPDC area.
- Given the proximity of the Wembley Designer Outlet to the OPDC area, a retail use of the exact same type might not be appropriate. However the concept of a similar centre could be supported within the proposed town centre hierarchy.

2.2.3.2 O2 Greenwich

The former Millennium Dome re-opened as the O2 in 2007 and is now a destination for visitors regionally, nationally and internationally. The site itself has become a successful entertainment venue and acts as a beacon for a new community on the Greenwich peninsula. The O2 Arena was reported to be the busiest concert venue in the world in 2008, having taken the crown away from Madison Square Garden, and for the 8th year running it has sold more tickets than anywhere else despite only being open for 200 days per annum. The three distinct takeaways from The O2 Greenwich are as follows:

- **Destination Creation:** The Dome has become a destination creator in its own right and is now AEG's best operated venue worldwide and London's largest entertainment zone. The emerging mixed use quarter has a vision to support 24,000 jobs over the long term in what is hoped to become a new business district for London. Despite this the development programme has highlighted that critical mass takes time to develop.
- **Branding Opportunities:** The naming rights granted to the Dome by O2 helped give publicity to the new entertainment quarter and helped put this part of east London on the map. Sponsorship revenue alone now contributes over £14m annually to the balance sheet.
- **Accessibility:** Whilst accessibility has been improved it still remains a key issue for Greenwich Peninsula as a whole as the scheme remains heavily reliant upon the London Underground.

Wider Regeneration Creation: There is no doubt that the O2 has helped transform Greenwich Peninsula and the surrounding neighbourhoods of East London. The O2 was initially built in the 1990s as the Millennium Dome on the land of a former gas works and with the arrival of the Jubilee Line and Thames Clipper the site's transport links improved and facilitated the land for further regeneration. The location of an arena in this location (wrapped by the Thames) is strategic as it doesn't need to be permeable and is only required to integrate with the community on the southern side.

There has been continuing investment to the area with the Emirates Air Line Experience and redevelopment of Greenwich Peninsula by Knight Dragon to deliver 10,000 homes and 3.5 million sq ft of shops, hotels, schools and public facilities.

Relevance to OPDC:

- Similar to the case of Wembley Stadium in illustrating the power that the brand-recognition of a cultural venue can have in putting an otherwise unknown location on the map, the naming rights granted to the former Dome by O2 aided the transition of the location to a now internationally renowned entertainment quarter.
- Whilst the catalyst can be regarded as a destination creator in its own right there will remain an emphasis on a catalyst within the OPDC area in being compatible with surrounding uses and integrated into the wider masterplan. In this vein the O2 is similar in principal to the stadia case studies which highlight the challenges in utilising the external circulation space.
- Any catalyst must be brought forward with sufficient access arrangements in place at the outset.
- The O2 has evolved over time and the structure of the building has been able to be adapted from the Millennium Experience to a concert and entertainment centre. It is essential that the structure of the catalyst within the OPDC area has flexibility and can be adjusted to meet demand.

2.2.3.3 Universal Studios Singapore

Universal Studios Singapore ("USS") is a theme park located in Resorts World Sentosa ("RWS"), which forms part of Sentosa Island 10 minutes to the south of Singapore mainland. The park is the smallest and cheapest to build of the 4 Universal Studios parks built to date (Hollywood, Orlando, Japan and Singapore). It comprises approximately 20 hectares (49 acres) and is the anchor attraction within the wider 49 hectare (121 acres) resort development. RWS is one of the most extensive and expensive resorts globally with a build cost of approximately \$6.6bn (£3.4bn), with the total build cost of the US theme park over \$1bn (£520m). The three distinct takeaways from Universal Studios Singapore are as follows:

- **Vision:** USS and the wider Resorts World Sentosa provides an example of integrated theme park, casino, aquarium and water park alongside supporting facilities such as hotels and restaurants. It is an 'integrated resort' that has not been developed in the UK.
- **Design Merit:** The land take required, at 49 acres, was relatively minimal as compared with other theme park developments. The space available has been used efficiently by not just providing rollercoaster rides but also a number of state of the art simulators that deliver thrill seekers a unique experience but require less land. Therefore, despite being the smallest of the Universal Studios parks it was still the 11th (out of 20) best attended theme park in Asia-Pacific in 2014.
- **Delivery:** The Singaporean Government identified a clear need to improve its tourism offer to support economic development and raise its profile in competition with other global cities. Its focus was on addressing this gap in the optimal way, based on research around different tourism and resort models. It identified its preferred solution before opening up the competition to the market. The land used for the resort was publicly owned. It was sold on a fixed price, so the tender focussed on the quality of the proposition rather than on maximising land receipts.

Wider Regeneration Creation: The theme park is located on an island so it is challenging to determine the impact it has had on the neighbouring mainland. The main purpose of the theme park was to increase Singapore's tourism offering. Subsequently the regeneration benefit should be seen across the entire city as it contributes a major catalyst to the city and should attract more inward investment and regeneration.

Relevance to OPDC:

- What is noticeable is that the economic value and profit is predominantly driven by the complementary offerings which the theme park supports, such as the hotels and restaurants. These are located outside of the theme park boundary which although is small in terms of its land take when compared to other theme park developments would make it one of the largest case studies reviewed.
- An integrated resort development within the OPDC area would be a first of its type in the UK but a significant proportion of the visitor spend would be likely to be retained on site and could pose difficulties in helping to support economic regeneration of the wider area and local economy.

2.2.4 Business and Conference Space

The case studies selected as part of the business and conference space use category include Melbourne Convention Centre, South Melbourne; Spitalfields & Bishops Square, East London; and Here East, East London. These case studies have or, in the case of Here East have the potential to demonstrate the catalytic effects which differ from typical commercial led developments. The Melbourne example provides an illustration of a convention centre at the heart of the regeneration of an area, whilst also having a relatively low land take in relation to competing venues such as the Excel in London. Spitalfields & Bishops Square was chosen to demonstrate the placemaking ability that a catalyst can have, which has successfully connected itself to the City of London and established a micro office and retail market in its own right. Here East was selected as it provides a successful example of an early phase development of a building built for a specific purpose (broadcasting and press centre for the London Olympics) which would have been demolished had the creativity of a commercial organisation not seen its potential for what is regarded as a successful alternative use.

Figure 4: Headline metrics from Business and Conference Space use category case studies

| | Melbourne Convention Centre | Spitalfields & Bishops Square | Here East |
|-----------------------------|-----------------------------|----------------------------------|-------------------------|
| General Demographics | | | |
| Land Take (acres) | 4.5 | 12 | 37 |
| Build Costs | £277m | £285m | £600m |
| Gross Direct Jobs | 170 | 3,400 | 5,300 |
| Gross Annual Direct GVA | Unknown | £196m | £340m |
| GVA Calculation Source | - | Productivity per worker estimate | The Guardian (Dec 2014) |
| Sector Demographics | | | |
| Annual Visitors | 0.7m | 2.6m | N/A |

Source: Deloitte

2.2.4.1 Melbourne Convention Centre

The Melbourne Convention and Exhibition Centre (MCEC) comprises two adjacent but fully integrated buildings located in an inner-city suburb of Melbourne, Australia. The centre hosts over 900 events each year comprising conventions and exhibitions, concerts, meetings, tradeshow and gala dinners. The facilities are both owned by the Victorian State Government and operated by the Melbourne Convention and Exhibition Trust. The three distinct takeaways from the Melbourne Convention Centre are as follows:

- **Catalyst for Wider Regeneration:** The Melbourne Convention Centre (MCC) has been highlighted as a catalyst for redevelopment of the surrounding area, including a riverfront retail promenade, a new Hilton Hotel, an 18,000 sqm office tower and a 50,000 sqm retail complex. The Melbourne Convention Centre development alone is anticipated to inject around \$197m (c. £112m) each year into the local economy for 25 years.
- **National Recognition:** The MCC was created to increase Melbourne's business tourism market and stimulate urban renewal of a previously rundown district. Having positioned Melbourne competitively in the national and international convention and exhibition market the centre now provides a significant tourism boost to the state from the increased number of delegates visiting annually.
- **Evolving Offering:** Despite the increasingly competitive market place, the MCEC is recognised globally for its event delivery and in 2014/15 hosted some of the largest medical conferences in the world. To maintain its position as the national leader in staging major business events the State Government announced in May 2015 plans to expand the MCEC to ensure it remains Australia's largest convention and exhibition space.

Relevance to OPDC:

- Melbourne Convention Centre indicates the potential that a convention centre can have in terms of acting as an anchor and catalyst for change and redevelopment in a capital city.
- There remains the ambition for an International Convention Centre in London, with the 2005 London ICC report indicating that a suitable footprint would be in the region of 5 acres (central) to 8 acres (suburban). This footprint is observed to be one of the lowest across the use categories reviewed.
- The objective for a catalyst within the OPDC to attract visitors at all times of year is also enhanced by the suggestion in the Melbourne example that visitors were attracted to the local area beyond those solely attending the conventions.
- Any convention centre would need to be carefully delivered and a good understanding of the frequency of use and complimentary uses is needed.

2.2.4.2 Spitalfields & Bishops Square

The regeneration of the Spitalfields neighbourhood bridged the more affluent Liverpool Street area of the City with more deprived communities in the East End. The Bishops Square project comprises refurbishment and extension of the market area to 12,000 sqm, 3,700 sqm of retail space, 72,000 sqm of offices, along with apartments, community facilities, new public space, cafes and restaurants. The regeneration of Spitalfields has transformed a 12 acre heritage asset formally in low density and infrequent use into a major destination around which bars, cafes, fashion and arts have flourished. The three distinct takeaways from Spitalfields & Bishops Square are as follows:

- **Retail Offering:** The regeneration demonstrates that traditional market stall retailing can operate successfully side by side with independent shops and high quality commercial offices to create an interesting mix of uses. The stallholder market trading five days per week has a reputation for cutting-edge, young fashion and furniture while the unit shops open seven days per week include mostly upper middle quality operators. This has achieved animation of the area both during the week and weekend.
- **Design Merit:** The resulting development depicts a successful example of the adaptive and creative use of heritage buildings and shared open spaces which deliver attractive destinations with character and vitality.
- **Accessibility:** The development has focussed on improving connectivity and has also stood to create a gateway between the City and Spitalfields with Bishops Square linking the old market into the City with the mixed use development of new office and commercial space. However, making the new development and permanent jobs relevant and accessible to the local population has proven challenging with a limited range of employment opportunities.

Wider Regeneration Creation: The regeneration of Bishops Square and Spitalfields has most certainly acted as a catalyst for the area to the North and East by initiating regeneration. Shortly after the reopening of Spitalfields the Bethnal Green City Challenge (£139m private sector investment leading to over 3,000 jobs and 259 businesses) and Cityside Regeneration supported the creation of over 1,000 jobs and 341 new businesses.

Relevance to OPDC:

- The case of Spitalfields and Bishops Square demonstrates how a mixed use destination can lead to an enhanced local retail offering as well as the attraction of higher value economic activities.
- With an objective for the catalyst to attract a high number of visitors and support regular animation the example has indicated how the inclusion of markets can help achieve this.
- The high GVA estimated is associated with the nature of the majority of the employment space at Bishops Square which tends to have a higher average productivity per worker compared to other sectors.
- It is essential that the OPDC area provides a range of jobs and not just higher skilled roles, this case study provides both.

2.2.4.3 Here East

Here East located to the North of the Olympic Stadium is the former press and broadcast centre for the London Olympic and Paralympic games in 2012. Constructed in 2012 for £600m, Delancey, the long leaseholder has since invested £115m to re-create the former broadcast centre into a new tech-hub. The scheme houses educational space, broadcasting studios, office space and a state of the art data centre. It also provides a new community destination featuring a landscaped canal side area with cafes, shops and restaurants. The distinct takeaways from Here East are as follows:

- **Cluster Benefits:** Here East is planned to become an innovation and enterprise hub for the technology community that will bring together entrepreneurs, academics, global corporates and social enterprises under one roof. 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 impacts 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.
- **Private Sector Innovation:** In early masterplanning by LLDC it was anticipated that the Press and Broadcast Centre would be demolished/dismantled and replaced with housing. Prior to doing so LLDC invited proposals for the site from the market. Here East provides an example of the innovative proposals that can be generated by the private sector when given the opportunity. LLDC received over 400 proposals for the future use of the Press and Broadcast Centre site and buildings when openly marketed, with the ambition to generate employment. The tech focussed hub is anticipated to be the largest creator of jobs on the park and has the potential to contribute considerably towards London’s wider economic growth by providing the space and facilities for this sector to expand in a cost-competitive location as compared with Shoreditch.

Wider Regeneration Creation: Here East has helped activate the far north west corner of the Olympic Park and with the high number of workers throughout the year this helps support retail, drinking establishments and leisure uses within the Park and around Hackney Wick.

Relevance to OPDC:

- Here East has demonstrated how the masterplan and vision for an area changes over time.
- Here East illustrates the economic potential that the agglomeration of higher value employment opportunities can have.
- The case study also shows the spread of jobs in the wider local area as well as additional supply chain impacts throughout the UK are consistent with the desire for a catalyst within the OPDC area to provide benefits at a local as well as at a London level.
- The focus of Here East in building on the historical presence of manufacturing in the wider area to create a tech-hub is an important consideration for a catalyst within the OPDC area with the objective of economic regeneration stemming from the provision of local jobs in key sectors.

2.3 Comparison of Case Study Categories

As highlighted in the preceding analysis, the individual case studies can vary significantly when compared against one another due to location, scale, former use, operator, purpose and surrounding environment.

Figure 5 below provides a summary of cost, size, economic impacts and spillovers, across the four use categories.

Figure 5: Summary findings of use categories

| | Sport Stadia | Education, Health & Culture | Retail & Leisure | Business and Conference Space |
|------------------------------|-------------------------------------|-----------------------------------------------------|----------------------------------------------------------|-----------------------------------------------------------------------|
| | Wembley, Etihad and Olympic Stadium | UAL, Crick Institute, Tate Modern and Olympicopolis | Wembley Designer Outlet, O2 Greenwich, Universal Studios | Melbourne Convention Centre, Spitalfields & Bishops Square, Here East |
| Build cost (millions) | £112m-£750m | £109m-£1,300m | £65-£520m | £277m-£600m |

Source: Deloitte. Note that the job metrics presented for Retail & Leisure reflect only Wembley Designer Outlet since only a composite direct and indirect job figure was available for the O2 Greenwich and Universal Studios Singapore.

| Size (acres) | 16-26 acres | 4-53 acres | 7-49 acres | 5-37 acres |
|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Build cost per acre</i> | £ 17,833,300 | £ 50,944,600 | £ 10,064,000 | £ 33,840,600 |
| Average direct jobs | 500 | 1,500 | 1,000 (Wembley only) | 400 |
| <i>Job density (direct jobs per acre)</i> | 21 | 195 | 143 (Wembley only) | 155 |
| <i>Cost per direct job</i> | £ 998,300 | £ 289,200 | £ 65,000 (Wembley only) | £ 608,800 |
| Direct GVA | £8m-£236m | £15m-£74m | £25m-£126m | £196m |
| Wider considerations | <ul style="list-style-type: none"> ✓ Ability to attract high footfall when in use ✗ May not be active year around ✗ Off-site spend may be minimal if users do not spend time in surrounding area ✗ Interaction with surrounding facilities must be carefully considered to minimise disruption on game days | <ul style="list-style-type: none"> ✓ Strong impact on placemaking and identity shaping ✓ Placemaking impact useful in attracting further inward investment ✓ Educational and health facilities tend to have more consistent footfall patterns | <ul style="list-style-type: none"> ✓ Can attract high footfall across the day depending on offer ✓ Attracts spend into local area | <ul style="list-style-type: none"> ✓ Regular footfall to local area ✓ Attractor of supporting services ✓ Possible agglomeration effect for specific sector activity |
| Overall Assessment of Financial, Economic and Wider Considerations | <p>Strengths: footfall, GVA, brand recognition</p> <p>Weaknesses: activity levels, off-site spend, surrounding use conflict, high land take</p> | <p>Strengths: placemaking impact, market attractiveness, lower land take</p> <p>Weaknesses: lower GVA, higher build costs</p> | <p>Strengths: footfall, spend, year-around usage, destination creator, lower land take</p> <p>Weaknesses: spend in wider area for leisure, placemaking, land take</p> | <p>Strengths: footfall, GVA, off-site spend, supporting services, lower land take</p> <p>Weaknesses: fewer direct jobs (comparatively), limited range of employment skills</p> |

The summarised conclusions for each use category are set out below.

2.3.1 Sport Stadia

The sports stadia case studies illustrate that this type of catalyst could be one of the most expensive (with a build cost range of £112-£750m) and also one of the largest in terms of land take (range of 16-26 acres).

In terms of impact, the gross value-add (GVA) that can be supported by a stadium has the potential to be amongst the highest of all use categories, however, is distorted by the operational costs including footballer remuneration. This is because in the most general terms, GVA can be understood as profits plus wages paid; the wages paid of a Premier League football club include the wages paid to players, which tend to be quite high. Nevertheless, the figures presented are in gross terms and additionality considerations such as leakage would need to be considered on a case by case basis in order to assess what proportion of such benefits are retained in the local area¹. Despite the high levels of GVA that sport stadia have been seen to support, the job density they provide (21 direct jobs per acre) is significantly less compared to the other use categories.

¹ Leakage refers to the proportion of benefits which do not remain within a specified local geography. It can apply to both jobs and GVA. For instance, while a football club can generate a very high GVA, a large proportion of this value added is the wages paid to the players, who may not live in the specified local area of analysis. Although supply chain impacts are not included in this review, the same principle applies: while direct activity can generate further benefits through supply chain demand, a local economy may not be able to

This figure is driven in part by the high land take required to deliver this catalyst use (particularly due to the requirement for circulation/egress space around the perimeter of the stadia), as well as the fact that stadium utilisation is restricted by factors such as wider demand e.g. demand for music/concert premises, turnaround time to make facility suitable for different uses (e.g. a sports game followed by a music concert) and other factors such as public restrictions on noise and disruption to the local area. Sports stadia tend to deliver positive spillovers linked to their usage on game-days, which supports high levels of footfall and brand recognition associated with the sporting club. However, this type of catalyst is not guaranteed to be utilised all year round and would require a clear plan to sustain activity levels throughout the year.

A specific issue associated to stadia is the need for circulation/egress space which poses design and animation challenges. Measures to prevent the emergence of inactive space will be essential. This use category also has implications for the transport network from match day crowds putting heightened demand on the network during peak times. There is a clear need to ensure that transport solutions are in place from the outset to prevent problems from arising which require over engineered transport solutions adding to infrastructure costs.

The large land take and impermeable nature of stadiums makes their location paramount to masterplanning. Furthermore, the footfall levels that stadia attract on game-days may, if not appropriately mitigated, cause negative spillovers related to noise, crime and safety.

2.3.2 **Education, Health & Culture**

The build costs associated with an education, health and/or culture catalyst are amongst the highest of the four use categories considered (£109m-£1,300m) with the weighting of costs being more influenced by the cultural elements rather than the education/health space. A factor influencing the build costs of those case studies considered in this analysis is whether they are a single facility (e.g. Tate Modern) or a cluster of multiple buildings (e.g. Olympicopolis). While the land required for this type of catalyst is seen to vary across options, it does present the opportunity for the smallest land take (4 acres) compared to the other use categories.

The direct GVA supported by educational, health and/or cultural facilities tends to be lower than the other uses largely due to the sector's low-to-average per worker productivity. That is to say, for every full-time equivalent (FTE) employed in the education, health or culture-related sectors, the value add they support in the economy is lower compared to other sectors. Typically this is a result of operating subsidies and/or not-for-profit status, which are necessary to support such facilities. GVA is composed of operating profit, wages and is net of relevant taxes/subsidies, so tends to be lower than other sectors for this reason.

For this reason, it is important to take into account the spillover benefits that are associated with such uses, including both market benefits (e.g. off-site spend) and non-market (e.g. benefits of cultural participation). As the case studies have illustrated, catalysts such as UAL in Kings Cross or Tate Modern have been recognised for the impact they've had in leveraging additional inward investment into an area due to the 'all-day' placemaking and identity shaping effect they have as catalysts. It is worth noting that despite the lower GVA supported, this type of catalyst use tends to provide the highest job density across the four use categories (195 jobs per acre).

2.3.3 **Retail & Leisure**

Retail and leisure catalysts were observed to have low to moderate build costs relative to the other use categories (£65m-£520m), which tend to be a proxy of the size and scale of the specific scheme. The land take of a retail and leisure catalyst (7-49 acres) is also relatively on par with the range observed for education, health and culture as well as business and conference space catalyst uses.

Retail and leisure catalyst uses were seen to provide a relatively high average direct GVA (£25m-£126m) per catalyst compared to the other categories. This GVA figure is driven by the high number of jobs delivered through this type of catalyst, which accords with the labour intensive

service 100% of this demand and therefore some supply chain spend may be done outside of the specific local area of analysis. The amount of spend or jobs created outside the area of analysis is considered leakage.

nature of the retail sector. Of the case studies reviewed as part of this use-category, Wembley Designer outlet provided 1,000 gross direct jobs, equating to a job density of 143 jobs per acre. For the remaining two case studies, O2 Greenwich and Universal Studios Singapore, the job figures include both direct and indirect jobs (600 and 10,000 jobs, respectively).

The high average direct GVA and jobs provided by retail and leisure catalyst uses are also supported by a number of positive spillovers. For retail specific catalysts (e.g. Wembley Designer Outlet), this includes the attraction of steady levels of footfall, with the potential for this to be staggered across all time of day. If the catalyst can be positioned as a destination creator (in the same way as O2 Greenwich) it has the potential to capture additional spend on services such as food and beverage or entertainment and recreation. Nevertheless, considerations must be made with regards to placemaking and integrating this type of catalyst with a cohesive offer in the wider area. As observed with the O2 Greenwich, although the catalyst is a destination in itself, it has yet to embed itself within a wider local offer and create positive spillovers to the surrounding area.

2.3.4 **Business and Conference Space**

Catalysts which fall in the business and conference space use category were observed to have amongst the lowest land take (5-37 acres), however the build costs associated are amongst the highest comparing across case studies (£277m-£600m). The facilities required to provide this type of catalyst use are relatively straightforward (e.g. general office space, convention centre, etc.), compared to the more architecturally noteworthy structures associated with sport or culture catalysts but nonetheless must be designed to meet the needs of the specific operator and be of world class standards.

In term of impacts, this type of catalyst was seen to provide fewer direct jobs (400 on average per catalyst) compared to other use categories. However, it did provide amongst the highest direct GVA (averaging £196m per catalyst), suggesting that employment associated with this use category tends to have a higher productivity per worker compared to other sectors, such as retail. Business and conference space catalysts tended to provide a job density of about 155 jobs per acre, second highest across all use categories considered.

The direct economic impacts are complemented by a number of positive spillovers, including steady footfall during working hours and the generation of demand for supporting services (such as food and beverage and accommodation services). In addition, this type of catalyst provides the opportunity to support the agglomeration of a specific sector activity if it is aligned to the presence of a similar or complementary sector in the local area. This point is highlighted by Here East which was deemed to be LLDC's white elephant prior to the marketing campaign, where the catalyst builds on the historical presence of manufacturing in the surrounding area and provides a modern space for digital makers to come together to grow their ideas and businesses as part of a more service sector-oriented industry.

While we have not considered standard office use to be a catalyst, the significant office space envisaged within the heart of Old Oak in and around the new Crossrail and HS2 station in itself acts as a catalyst. Key to its success is finding suitable pioneering tenants who have a long term belief in the area. The public sector has played a significant part in acting as a catalyst for regeneration by taking significant space in major regeneration schemes including Stratford, London Bridge and Greenwich. Public sector occupation in the heart of Old Oak should therefore be explored and welcomed to help create the new environment and encourage other occupiers to the area.

3 Planning Criteria and Visioning Workshop

3.1 Introduction

A long-list of criteria was developed in consultation with OPDC officers. This long-list of criteria provided a starting point for developing appropriate assessment criteria to inform the area’s planning policy and also provide the context within which the masterplan will be developed. This long-list was then consolidated into a refined short-list through grouping and discussion with OPDC and then used as a means of measuring the proposed catalyst uses to demonstrate their performance.

Following the development of the short-listed criteria, Deloitte led a visioning workshop with OPDC officers in order to develop the overarching strategic objectives of potential catalysts within the OPDC area. Five strategic objectives were identified, which align to the short-listed planning criteria and work to represent the key factors that OPDC agree must be fulfilled in order for any catalyst to be a success. These objectives serve as a second screening process that catalyst proposals must pass, in addition to performance against the short-listed planning criteria.

This section sets out the original long-list of planning criteria, the short-listed criteria and the strategic objectives.

3.2 Long-list of Planning Criteria

The long-list of planning criteria sets out the aims, strategic visions and aspirations that OPDC believe a catalyst should fulfil.

The long list provided below sets out the specific criteria, an explanation of the criteria and the rationale for why it is important. Each criteria relates to one of five sub-categories: economic, place making, deliverability, regeneration and financial. The purpose of these sub-categories is to simply illustrate how the criteria considers the suitability of the catalyst from a range of different perspectives.

Figure 6a: Long-list of Planning Criteria (Economic)

| Criteria | Explanation | Rational | Sub-category |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Core economic benefits | <ul style="list-style-type: none"> Catalyst will provide core economic benefits (direct jobs, GVA, etc.) in proportion to its scale and land take. | <ul style="list-style-type: none"> Ensure the catalyst is maximising the economic opportunity in an effective way. Ensure sustainable intensification of the brownfield land. | Economic |
| Economic regeneration | <ul style="list-style-type: none"> The catalyst will support the economic regeneration of the local area through any of the following: <ul style="list-style-type: none"> Provision of a range of jobs Provision of jobs in a key sector identified for potential future growth in local area Supporting growth and development of a key sector for local economy | <ul style="list-style-type: none"> Support economic regeneration of the wider area. Support the improvement of local employment in key sectors. | Economic |

| | | | |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Local benefit retention | <ul style="list-style-type: none"> A large proportion of the public benefits generated by the catalyst will remain within the local area. | <ul style="list-style-type: none"> Catalyst should be structured and operated in a way that ensures benefits are embedded in local and London level economy. | Economic |
| Additional benefit retention | <ul style="list-style-type: none"> The benefits supported by the catalyst will be 'additional' at both the local and London level. | <ul style="list-style-type: none"> It will not be considered additional if the catalyst is detracting activity away from other parts of the local and London economy. | Economic |

Figure 6b: Long-list of Planning Criteria (Deliverability)

| Criteria | Explanation | Rational | Sub-category |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Delivery of homes and jobs | <ul style="list-style-type: none"> Through the scale of the land take required and design of the catalyst use, the wider deliverability of the quantum of homes and jobs targeted within Old Oak should not be compromised. | <ul style="list-style-type: none"> Need for the catalyst to not jeopardise the delivery of OPDC's overall target for jobs and homes. | Deliverability |
| Infrastructure | <ul style="list-style-type: none"> The use proposed should mitigate any additional infrastructure impact above the baseline anticipated in the Local Plan and Transport Study. | <ul style="list-style-type: none"> Proposed use should not place an additional infrastructure burden at Old Oak. All additional costs in relation to the catalyst use should be provided privately. | Deliverability |

Figure 6c: Long-list of Planning Criteria (Placemaking)

| Criteria | Explanation | Rational | Sub-category |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Public Realm | <ul style="list-style-type: none"> High quality public realm, effective estate management, and an adequate proportion of 'active frontage'. | <ul style="list-style-type: none"> Provide access to a high quality public environment which incorporates open space to enhance the success of the scheme. | Placemaking |
| Compatibility with surrounding uses | <ul style="list-style-type: none"> To ensure the catalyst enhances and supports the amenity and desirability of bringing forward the core. | <ul style="list-style-type: none"> Catalyst use will be integrated into the masterplan and will benefit the surrounding area. | Placemaking |
| Footfall and animation | <ul style="list-style-type: none"> The catalyst should attract high numbers of visitors to Old Oak and support regular animation. | <ul style="list-style-type: none"> The space should be regularly used during a 24hr, weekly and season basis to support animation of the area. | Placemaking |
| Identity | <ul style="list-style-type: none"> To support the creation of a distinctive identity for Old Oak, that is aligned with the wider Old Oak brand. | <ul style="list-style-type: none"> Catalyst needs to support the creation of an identity and brand at Old Oak. | Placemaking |
| Architecture / iconic features | <ul style="list-style-type: none"> The catalyst will promote existing features and/or incorporate iconic features which can be creatively developed into the scheme. | <ul style="list-style-type: none"> The catalyst will demonstrate best practice standards in terms of design to attract interest and help establish a | Placemaking |

| | | | |
|--|--|-----------------------------------|--|
| | | destination and a sense of place. | |
|--|--|-----------------------------------|--|

Figure 6d: Long-list of Planning Criteria (Regeneration)

| Criteria | Explanation | Rational | Sub-category |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Participation and access | <ul style="list-style-type: none"> The catalyst will be accessible in both offer and price to the local community. | <ul style="list-style-type: none"> Catalyst should provide an offer that is attractive and accessible to both the local community as well as London, the UK and internationally. There will be a need for operators to set out how they will attract and support local people to attend the facility. | Regeneration |
| Local perceptions | <ul style="list-style-type: none"> The catalyst will effect a positive change on local people's perception of the area in relation to its sense of community, quality of place, civic pride and sense of safety. | <ul style="list-style-type: none"> Catalyst should be seen by locals as a generating a positive impact on the fabric of their community. | Regeneration |
| Education and Skills | <ul style="list-style-type: none"> The catalyst will support developing the education and skills base of the local area to converge with the London average. | <ul style="list-style-type: none"> Longer term benefits of the catalysts can be embedded in the local community by supporting the enhancement of the local area's education and skills base. Provision of high quality jobs in a local area is of no use if the local population is not skilled enough to access them. | Regeneration |

Figure 6e: Long-list of Planning Criteria (Financial and Deliverability)

| Criteria | Explanation | Rational | Sub-category |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| OPDC business plan | <ul style="list-style-type: none"> To ensure that the development and infrastructure is funded privately and not reliant upon further public sector subsidy from OPDC (during both the set-up and operational phases). | <ul style="list-style-type: none"> To ensure the funding requirements for the masterplan are not increased beyond the current infrastructure burden. All additional costs in relation to the catalyst use should be provided privately. | Financial and deliverability |
| Partner Credibility | <ul style="list-style-type: none"> To ensure that robust funding proposals are in position alongside a developer/partner/ occupier with a track record. | <ul style="list-style-type: none"> The need to appoint/ procure the right developer/partner is key where complicated solutions need to be overcome. | Financial and deliverability |

| | | | |
|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| Wider scheme financial impact and deliverability | <ul style="list-style-type: none"> The presence of the catalyst will support the viability of the wider regeneration area by increasing market confidence, de-risking other future investments and supporting OPDC land value appreciation. | <ul style="list-style-type: none"> The catalyst is different to other potential regeneration investments because it must increase the overall viability of the OO regeneration project and open opportunities for further investment, which otherwise might not come forward. It should support value creation and deliverability of OPDC's wider landholdings and be complementary to value appreciation. | Financial and deliverability |
| Cost and duration | <ul style="list-style-type: none"> To deliver a catalyst use which is financially viable with stakeholders recognising the need to take a long term view. | <ul style="list-style-type: none"> The development of critical mass takes time (dependent upon the market cycle) with a requirement for a cohesive masterplan and development company to manage the ongoing delivery. | Financial and deliverability |

3.3 Short list of Planning Criteria

The short-list of planning criteria presented below in Figure 7 was developed through consultation with OPDC officers and is a consolidated list of the long-list of criteria set out in the previous section.

The short-list of criteria are intended to be used by OPDC to assess the expected performance of proposed catalyst schemes. It will require applicants (developers) to demonstrate the catalyst's positive performance against the criteria set out in Figure 7 which OPDC have identified as necessary for any scheme to fulfil in order to be effective. To demonstrate a catalysts positive performance against these criteria, proposals will need to benchmark against the performance of their catalyst compared to relevant catalyst case studies within this document, as well as other comparable projects, which should be agreed with the OPDC planning team.

Figure 7: Short-list of Planning Criteria (Developer Criteria)

| Short List Criteria | Scoring Criteria | Examples of evidence that can be used demonstrate performance against criteria |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Part of a holistic offer | <ul style="list-style-type: none"> It does not impact on the delivery of OPDC's housing target. It does not have a negative impact on land values of adjacent uses It contributes to the quantum, quality and design of public realm and open space. It optimises the number of hours/days the catalyst is utilised per annum. It optimises the proportion of active and/or positive frontage. | <p>The developer should outline how the catalyst will impact on the delivery of new homes. [Developer to outline the required land take of the catalyst as a percentage of the overall developable area in order to understand the number of homes foregone in the wider opportunity area, assuming the housing density was to remain the same elsewhere.</p> <p>Evidence should be provided on the investment into public realm and open space, considerations which are given to its design and quality, its integration with the surrounding area and long term stewardship and estate management costs.</p> |

| | | |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Financially sustainable</p> | <ul style="list-style-type: none"> • It is supported by appropriate capital and revenue expenditure on the facility and identified funding sources • The catalyst does not have unacceptable requirements for infrastructure to the detriment of securing funding and financing for other priority infrastructure • The proposed catalyst provides appropriate contributions towards the costs of infrastructure requirements to support catalyst use | <p>The developer should consider the impact the catalyst will have on wider built infrastructure and any additional expenditure that would be required to accommodate it, who would provide and who would fund it.</p> |
| <p>Complements wider environment</p> | <ul style="list-style-type: none"> • It optimises total direct and indirect jobs. • It optimises full time equivalent (FTE) jobs. • It has a high overall Gross Value Added (GVA) and average GVA per employee. • It optimises direct, indirect and FTE jobs per hectare. • It provides a range of direct, indirect and FTE jobs by sector and skills level. • It supports the delivery of additional (non-displacement) jobs within: <ul style="list-style-type: none"> ○ the OPDC area; ○ the boroughs of Brent, Ealing and Hammersmith and Fulham; and ○ Greater London | <p>The developer should provide evidence on the total number of direct FTE jobs that will be supported by the catalyst. GVA can be estimated, for example, using productivity per worker assumptions. The developer should also provide commentary on supporting sectors that are important to growth.</p> <p>Additional jobs in the OPDC area are those created which otherwise would not have existed without the catalyst intervention. Additionality can be estimated by comparing the area's existing offer against the proposed impact and how the catalyst may differ from or duplicate this.</p> <p>The developer should provide evidence on mechanisms that would be employed in order to help local people and businesses benefit from the scheme (e.g. community benefits), including proposed employment and training initiatives, both during and post construction</p> |
| <p>Generates or sustains momentum</p> | <ul style="list-style-type: none"> • It scores positively when compared against other comparable examples of other catalysts and statistical evidence of their impact on development, investment and awareness | |
| <p>Leverages HS2 and Crossrail</p> | <ul style="list-style-type: none"> • It optimises net additional Gross Value Added (GVA) to London and the UK; • It optimises footfall per annum. | <p>Evidence should be provided on how often the catalyst will be open and in use, the expected footfall it will generate both when in use as well as when not in use, as well as any plans to enable 'meanwhile' uses in order to maintain steady levels of footfall</p> |

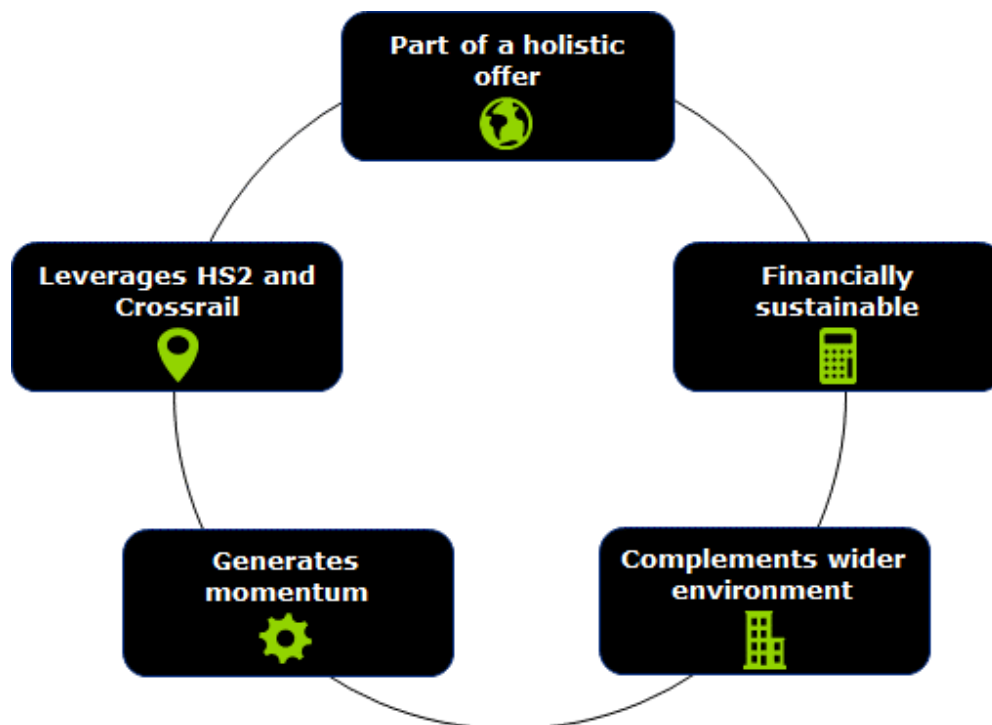
3.4 Strategic Objectives for Old Oak Common Catalyst

During the Visioning Workshop, Deloitte worked in consultation with OPDC to identify five strategic objectives that must be fulfilled by any catalyst use in order for it to be considered a success.

The definition of a Strategic Objective is an overarching objective that should be used as a check and balance. The objectives should be referenced to ensure that individual and aggregate catalyst uses are in keeping with the wider requirements of the OPDC area.

These objectives should be used alongside the planning criteria to evaluate the proposed catalyst projects to ensure that any proposed catalyst is aligned to OPDC's vision and aspirations. These objectives are presented in Figure 8 and additional detail on each is provided in the paragraphs which follow.

Figure 8: Strategic Objectives for OPDC Catalyst



Source: Deloitte

3.4.1 Part of a holistic offer

It is important that the catalysts chosen are coherent with OPDC's wider vision for the area in terms of land use, socio-economic regeneration and planning. Although the catalyst may initially stand on its own in the regeneration area until subsequent development follows, the catalyst use should be chosen with a mind to what development is likely to follow and how this will interact with the catalyst. Overall, OPDC is aspiring to deliver a holistic regeneration for the Old Oak area and any possible catalyst should be evaluated according to the specific offer it will provide (e.g. cultural, retail and local services, etc.) and how this will work with the wider plans to create a successful neighbourhood.

Any proposed catalyst should be considered in the context of the wider site and its impact on surrounding uses and other catalysts. For instance, it is envisaged that more than one catalyst might be suitable within the OPDC area, due to its scale, and therefore it is essential that the catalysts delivered work together and are not conflicting.

As larger uses, catalysts will play an integral role in the place-making and identity of the area. To support this, the proposed catalyst should be of a high design quality and architecture, which

celebrates the catalyst as an iconic feature and destination use within the development. The case studies demonstrate the importance of providing a high quality of public realm around proposed catalysts. Proposed catalysts should demonstrate that the proposal is setting a high benchmark in terms of the quality and quantity of public realm and that appropriate management arrangements have been put in place for its maintenance.

To ensure accordance with this objective, in addition to the above short-list quantitative planning criteria, proposals should also be required to demonstrate how their proposal:

- supports the delivery of the spatial vision and strategic policies;
- complements other existing or planned catalysts and surrounding uses;
- It does not inhibit development on surrounding sites; and
- supports place-making and identity.

3.4.2 **Financially sustainable**

The importance of a financially sustainable catalyst relates to both the catalyst itself as well as the impact it has on the sustainability of the wider surrounding area, such as infrastructure. For the catalyst, it is important that the developer and/or operator demonstrate that the catalyst can be financially viable from the outset, not depending solely on momentum from the rest of the development to become a viable investment. While it is recognised that the time horizon of the investment will be medium to long-term, it will be critical for developers and/or operators to demonstrate how risks to financial sustainability can be mitigated.

Consideration must also be given on how the catalyst may impact on the sustainability of the surrounding area in terms of infrastructure requirements and long term stewardship and management of the surrounding area. Certain catalyst uses may demand additional expenditure to upgrade stations and/or other transport nodes. If this is the case, it should be demonstrated how this additional infrastructure expenditure would impact upon spending in other areas such as public realm, skills and training and other community schemes or provide funding to meet any shortfall.

The catalyst must also support the viability of the wider regeneration area by increasing market confidence, de-risking other future investments into the area and supporting the development area's land value appreciation and the public sector's land return. From this perspective, the catalyst must have a positive impact on leveraging subsequent investment into the area and act as a core driver of value creation in the early days of the area's long-term regeneration.

To ensure accordance with this objective, in addition to the above short-list quantitative planning criteria, proposals should also be required to demonstrate how their proposal:

- is financially deliverable;
- does not negatively impact on the viability of the surrounding area, in terms of affordable housing delivery and infrastructure requirements;
- has arrangements in place for its long term stewardship and management; and
- helps to leverage investment.

3.4.3 **Complements wider environment**

Although the catalyst is envisioned as being one of the first major hubs of activity present within the OPDC area, consideration must be given to its position within its immediate surrounding area and wider London. The relationship between the catalyst, the OPDC area and wider West London, relates to several facets:

- **Local inclusivity:** any proposed catalyst use should be considered against how it complements the characteristics and meets the needs of the local resident population. While it is envisioned that the OPDC area and particularly Old Oak become a destination for local, national and international visitors alike, a measure of its success will be the impact it has on ensuring regeneration benefits are embedded within the local area. This consideration should be made both in terms of supporting the existing characteristics of the local fabric (e.g. community groups and diversity amongst local population) as well as meeting the needs of local residents

(e.g. provision of skills, training, and employment opportunities). Moreover, the catalyst itself should be inclusive and provide direct amenity value for the local population as well as catering to a wider visitor market. The way in which the catalyst could provide amenity value for the local population will depend upon the specific catalyst use: while some catalysts (e.g. retail) may provide direct amenity value to local and wider visitors alike, others (e.g. sports stadia) may require a specific initiative to give local community groups access to the facilities on non-game days to host events serving the local community (e.g. youth clubs, school groups, local job fairs, etc.).

- **Existing economic activity:** consideration should be given to the existing supply of activity and the extent to which the catalyst would compete with, complement or add to existing local provision. Uses which would cannibalise existing activity in the local area should be carefully considered. The activity of the catalysts should also be assessed from a pan-London perspective to understand the extent to which it adds to (i.e. is additional to) the existing offer as a whole or is negative to specific locations. In this assessment, it is also important to consider the demand for particular services or activities – even if provision already exists, if there is unmet demand then the catalyst would not cannibalise existing activity and would serve local needs.
- **Future growth sectors:** the catalyst use can also relate to future growth sectors of both the local area as well as London as a whole. Although these sectors may not be fully developed at present, depending on the catalyst activity, it could act as a driver of growth for these sectors. Therefore consideration should be given to the extent to which the catalyst will complement the strategic vision for the OPDC area, OPDC identified growth sectors and London’s future growth sectors.

To ensure accordance with this objective, in addition to the above short-list quantitative planning criteria, proposals should also be required to demonstrate how their proposal:

- complements London and West London’s needs and growth aspirations;
- complements the local characteristics and meets the needs of and provides benefits for the local population; and
- adds value to local economic activity

3.4.4 **Generates momentum**

The purpose of the catalyst is to kick-start development, investment, awareness, identity and ‘buzz’ around Old Oak and Park Royal. It is envisaged that the catalyst generates this momentum from the outset, and is able to do so at a point in time when the site itself is not currently well-known and has yet to become a destination.

This strategic objective is critical to ensure that the catalyst has the desired effect, which is distinctly different from other investments which will follow. As such, an important consideration that must be made with respect to this strategic objective is whether or not the catalyst can generate an appropriate level of momentum from the outset until other investment follows. The ability to generate such ‘momentum’ will have knock-on effects both in terms of kick-starting regeneration in the wider OPDC area, as well as financial impacts for OPDC through the impact on surrounding land values they own.

To ensure accordance with this objective, in addition to the above short-list quantitative planning criteria, proposals should also be required to demonstrate how their proposal helps to kick-start and/or sustain development, investment and awareness.

3.4.5 **Leverages HS2 and Crossrail**

It is critically important that any catalyst use leverages the opportunity presented by HS2 and Crossrail to create a fitting destination for London and the UK. The London Plan makes clear the priority of leveraging the city’s major transport nodes as hubs for new employment centres and residential development. More broadly, these transport nodes are catalysts in themselves which have the potential to kick-start regeneration, and the catalyst project must make use of this opportunity.

The HS2 and Crossrail station will provide enhanced east-to-west and north-to-south connectivity for the OPDC area, and this connectivity should be considered and capitalised upon when a proposed catalyst project is considered. For example, the connection that this station will provide between Old Oak and Heathrow Airport is unprecedented, giving the site immediate access to continental Europe and beyond for business and leisure purposes. Additionally, the North-to-South connectivity from HS2 means that Old Oak could become a day destination for many more visitors from across the UK. The catalyst use chosen for the area should show a clear link to how it will capitalise upon these unique opportunities.

To ensure accordance with this objective, in addition to the above short-list quantitative planning criteria, proposals should also be required to demonstrate how their proposal capitalises on the connectivity, identity and the large number of people that will be brought to the area by the planned HS2 and Crossrail station.

4 Conclusion

4.1 Strategic Overview for Determining Catalyst Uses

There is an argument to suggest that the OPDC area already has its biggest catalyst use being proposed through the Crossrail and HS2 station which in itself (either Crossrail on its own or with HS2) will promote the area. As the station will not be operational until 2026, this report is focused on other catalyst uses for the area assuming that the station materialises. It addresses a variety of factors which are at the heart of OPDC's objectives for the area, which will help to promote economic regeneration in the interim and longer term.

The catalysts within this report have been analysed in detail and have been reviewed to consider their positive and negative attributes and how they have contributed as catalysts to the wider regeneration of their surrounding areas and how this might be applied within the OPDC area.

For the case studies analysed the majority of catalysts have been developed from either an international event, landmark occasion i.e. the millennium or the Olympics, used to crystallise a large regeneration project, or to facilitate a use from a specialised emerging occupiers i.e. Here East and the Crick Institute. As this is not the case for Old Oak and Park Royal, OPDC is in a position where it needs to consider how it plans for catalyst uses, through a framework to assess them against its vision for the area and in meeting the identified five strategic aims.

Despite the necessity to have a structured plan for an appropriate catalyst use and to attempt to steer the Local Plan and Masterplan to accommodate certain use categories, flexibility should be maintained. Our experiences and lessons learnt on major regeneration projects such as this leads us to believe, that throughout the delivery of the masterplan some proposed catalyst uses will fall away and new opportunities will arise.

We do not believe that a single catalyst use will meet the needs of the overall area. From identifying different character and value areas through the masterplanning process, we will be able to identify where potential catalysts could be delivered. Throughout the masterplanning process and within OPDC's planning policy it is essential that flexibility is maintained to adapt to changes in market condition and different types of catalyst uses.

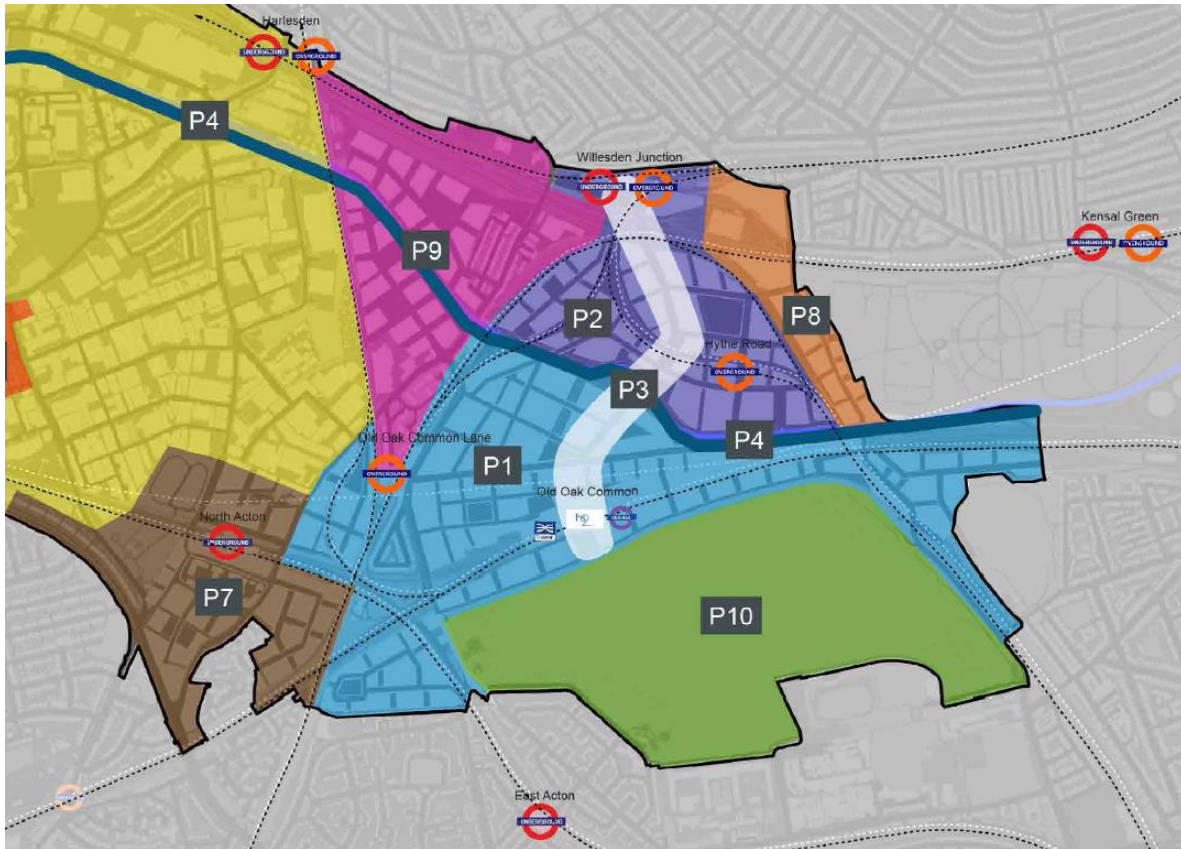
4.1.1 Masterplanning Scenarios

We are aware that OPDC is in the process of procuring a masterplanning team. It will be essential to test scenarios through the masterplanning process to consider different locations for catalyst uses. In forming the vision, a key consideration of where the catalysts could be located is how the area will feel and how movement between the character areas will take place. Furthermore, the demand and requirements of catalyst uses will vary over time and depend on trends, market conditions and funding. For more generic uses which could occupy a building akin to an office, it is relatively easy to build in flexibility, however more challenging uses such as stadiums will need to be embedded early with the rest of the masterplanning forming around it. We fully envisage the masterplan to be revisited several times during the course of the project.

We envisage that more than one catalyst should be delivered and OPDC have identified four broad locations within their Reg 18 draft Local Plan that might be suitable for catalyst uses:

- Old Oak South (P1)
- Old Oak North (P2)
- Old Oak High Street (P3)
- North Acton (P7)

(Source: OPDC Draft Local Plan – Figure 23: The Places)



Old Oak South (P1) will already have the proposed catalyst of the HS2 and Crossrail Station, however, without development on the Crossrail Depot limited other catalyst uses could be delivered on the HS2 over station development. If the Depot could be relocated or decked, this would open up the site to both small and medium size catalysts, especially along the high street and canal.

Old Oak North (P2) will hopefully be delivered as one of the early phases of development and has the potential to deliver small, medium and large scale catalysts. There is a combination of both private and public sector land owners who need to be aligned to ensure successful catalysts are delivered alongside a clear vision for the area.

Old Oak High Street (P3) area has the potential to deliver small catalyst uses and the high street in itself should hopefully provide a catalyst if delivered successfully, particularly where it crosses the canal. I.e. Camden Lock is one of London's top tourist attractions for its retail offer, canal and sense of place.

North Acton (P7) has potential to deliver catalyst uses, however, this could be challenging as the majority of land is in private sector ownership. OPDC could steer land owners through the Local Plan to identify suitable catalyst uses.

Through the master planning process character areas should be created with space for catalyst uses. The catalysts uses will hopefully create identity and form distinct areas across the masterplan helping to create distinct submarkets. These submarkets should help speed up absorption rates of both office and residential units.

4.1.2 Timing of Catalyst

Providing a catalyst at an early phase of delivery in most cases would be beneficial if it positively contributes to establishing identity, place making and delivery; this will help attract uses such as offices and residential and help promote values. Despite this it could be difficult to attract a catalyst at an early phase of delivery to a location with limited transport connections until the Old Oak Common HS2 and Crossrail station are open in 2026. In terms of early delivery, placing

catalysts in close proximity to the existing infrastructure and road network will be important i.e. Willesden Junction and North Acton.

The sequence of uses/catalysts will also be important and any early adoption of a catalyst use will shape the perception of the overall site and indeed influence future uses. The early delivery of a stadium or potentially a convention centre (i.e. irregular high volume flows) could well deter residents until those uses have matured and the implications of these uses in terms of crowd flows and congestion have been established.

4.1.3 **Potential Financial Impact of Catalyst**

The financial impact of catalyst uses has three component parts.

- The cost of the facility. Many desirable facilities such as museums and cultural buildings lack funding and will require public subsidy to be delivered whereas others are more commercially focused, though most will be marginally viable.
- There is an opportunity lost in terms of land value as the catalysts examined are unlikely to be highest use value when compared to offices and residential. Therefore catalysts can either come forward on publically owned land or it can be incorporated into the private land. OPDC needs to ensure the burden is shared with Private sector land owners. This will enable OPDC to deliver housing and more valuable use classes alongside the catalysts.
- The value impact to surrounding uses – some catalyst uses will help promote values around them by increasing demand in the location. The right types of use will also help the site develop at a faster pace. OPDC should therefore be mindful and financially test different scenarios to examine the potential impact of each of the catalyst uses and this could also form part of the decision criteria.

4.1.4 **Risk of Failure**

Once the catalyst is developed there is a risk it might not be as profitable as envisaged or does not work within the realms of the wider scheme. These factors could arise by a change in the economy, technology, competing locations and consumer markets. If the catalyst is not successful and built on public sector land, the organisation should ensure that it can claw back or take possession of the building should it fail – this is normally done as a provision within the lease. If it is third party land, there is a limited amount of control that OPDC has to control the building use.

4.1.5 **Political Support**

The catalysts could form a significant part of area and political support and commitment might be required to enable the catalyst to be developed or facilitated. Therefore, it is important the catalyst is seen as being valued at both a local and regional level and is seen to leverage off HS2 and Crossrail.

4.1.6 **Live Market Requirements**

The current masterplan needs to be developed and commercially engineered before OPDC can engage with the market, therefore we have only provided suggestions of potential occupiers below instead of undertaking detailed occupier analysis and engagement. Once OPDC's masterplan and character areas have been developed over the course of 2017, OPDC would be in a strong position to pursue market engagement.

4.2 **Next Steps**

OPDC are due to appoint a masterplanning consortium in March 2017 to develop a preferred option to feed into an outline planning application. It is therefore essential that broad typologies of potential catalyst uses are factored into the masterplanning process and the social, economic, utilities, services, infrastructure and financial impacts of each catalyst uses are taken into consideration.

In determining the most appropriate catalysts to be included within the masterplan options, the analysis within Section 4 of this report should be reviewed to consider the benefits each use category could potentially deliver. Further analysis into each of the specific use categories should be considered alongside occupier demand across London.

In a similar vein to when other catalyst uses have been introduced into schemes, discussions with government departments responsible for the likes of health, education, culture and leisure may help to draw attention to the area and identify potential catalysts or anchor uses. More commercial catalyst uses may require a more direct approach.



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