INTRODUCTION:

SMART INVESTMENT, SUSTAINABLE RETURNS

London has been the global go-to destination for real estate investors for decades. A resilient economy, mature legal infrastructure and unique position as a hub for fast-growth technology companies and an established services sector have proven to be a compelling cocktail.

While Brexit is introducing new challenges and opportunities for business, London continues to be seen as a safe-haven, particularly as new sources of uncertainty emerge in the Eurozone. Viewed over the medium-term, London’s commercial and residential market has attracted consistently high levels of investment and has delivered strong returns.

London is a dynamic city and exciting changes are on the horizon. The capital is embracing Big Data with the rollout of semantic web, higher environmental standards are driving new innovations in sustainable design, and an expanding urban population is generating demand for housing, infrastructure and smart development – all good news for keen investors.

But the city is also likely to feel the strain during this period of change. Political change has followed the London Mayoral elections in 2016 and whilst there remains a favourable environment for housing developers, the private sector is expected to make a greater contribution to public housing supply - which is influencing unconsented land values. The result of the EU referendum could also have unexpected effects for London depending on how arrangements for access to markets for services and labour are resolved. However, commitments by Google, Apple and Facebook to large London lettings illustrate that London’s office market continues to evolve to meet the needs of ever more footloose, global occupiers.

One issue which is not going to be resolved quickly is growing social inequality, which has been a big factor behind the outcome of the UK and Italian referendums and the US presidential election. As London struggles to house its poor, it continues to attract ultra-high-net-worth individuals and global businesses.

Against this backdrop of uncertainty, Arcadis set out to compile an insightful guide to investing in London. In this review, we provide an outlook across London’s investment landscape, insight for investors new and old, and identify the key opportunities and challenges to generating returns in an increasingly dynamic market.
Whether you’re considering investing in London for the first time or a seasoned expert looking to realize greater value from your investments, Arcadis can be your guide. We know how to deliver remarkable outcomes from investment in built assets.

READ ON IF YOU’RE WONDERING...

HOW DOES THE LAND MARKET WORK?

WHAT ARE THE OPTIONS FOR LAND USE?

HOW DOES THE PLANNING PROCESS WORK?
READ ON IF YOU'RE WONDERING…
WHAT ARE THE MAJOR DEVELOPMENT COST DRIVERS?
WHAT ARE THE MAIN RISKS ASSOCIATED WITH DEVELOPMENT IN LONDON?
HOW SHOULD WE SELECT A PROJECT TEAM?
POLITICS:

- The Greater London Authority (GLA) is responsible for transport, strategic planning and regeneration. Local government functions are carried out by 32 London Boroughs and the City of London Corporation.

- The recently elected London Mayor, Sadiq Khan, was elected on a left of centre platform. Key policy pledges are focused on affordable transport and housing. The mayor is supportive of investment in affordable homes for Londoners but the planning regime is likely to be less supportive of high-end residential development than the previous Mayor, Boris Johnson.

- Housing development has become increasingly political, with local politicians intervening to secure an increased contribution from developers to public housing through the planning process.

- Devolution of funding and political power to cities in England is accelerating. London is competing with other cities for investment and influence. However, London currently gets much more investment than any other city.

- A referendum on the UK’s membership of the EU must be held by 2017. An ‘out’ vote potentially threatens London’s trading relationships with Europe and its status as a headquarters location.
<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>LONDON</th>
<th>DUBAI</th>
<th>SHANGHAI</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP growth</td>
<td>3%</td>
<td>4.3% (2013-14)</td>
<td>7.7%</td>
</tr>
<tr>
<td>Population</td>
<td>8.6m (Jan 2015)</td>
<td>2.1m (2013)</td>
<td>24.2m (end 2013)</td>
</tr>
<tr>
<td>City size</td>
<td>1,572 km²</td>
<td>4,110 km²</td>
<td>3,920 km²</td>
</tr>
<tr>
<td>Population density</td>
<td>5,471 /km²</td>
<td>510 /km²</td>
<td>6,173 /km²</td>
</tr>
<tr>
<td>Average passenger journeys</td>
<td>283m per month (12 month moving average)</td>
<td>36m per month (2013)</td>
<td>530m per month (2013 average)</td>
</tr>
<tr>
<td>Unemployment</td>
<td>6.3% (Apr 2015)</td>
<td>4.2% (2012 UAE)</td>
<td>4.2% (end 2013)</td>
</tr>
<tr>
<td>Employment growth</td>
<td>3.8% (annual, Q4 2014)</td>
<td>6.5% (2014)</td>
<td>0.8% (2013-14)</td>
</tr>
</tbody>
</table>

*refer to inside back cover for source, definitions and notes.
ECONOMIC:

- London grew faster than the rest of the UK by 0.7% in 2014. London is expected to outperform the rest of the UK by 1%+ per year between 2015 and 2020.
- London’s 3.5% employment growth in 2014 was the strongest since the 1990s boom.
- Cross border real estate investment volumes in London have been the highest in the world for the past 4 years. In 2014, volumes were double those in New York, according to JLL.
- Development land values in central London rose by 48% in 3 years to January 2015. This data suggests that London may be approaching the peak of its investment cycle.
- London currently has strong retail and office markets. The booming residential market has attracted a lot of development and is currently showing signs of consolidation.

SOCIAL:

- London’s population is now at an all-time high of 8.6 million.
- The population is forecast to grow to 9 million by 2020 and to 9.7 million by 2030.
- Public housing and the transport network are under great pressure.

Figure 2: City Metrics

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>INDICATOR</th>
<th>LONDON</th>
<th>DUBAI</th>
<th>SHANGHAI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitiveness</td>
<td>Power City Index (Mori Memorial Foundation)</td>
<td>1/40</td>
<td>n/a</td>
<td>12/40</td>
</tr>
<tr>
<td>Financial Power</td>
<td>Financial Centres index (Z/Yen)</td>
<td>1/87</td>
<td>18/87</td>
<td>16/87</td>
</tr>
<tr>
<td>Global Engagement</td>
<td>Global Cities Index (AT Kearney)</td>
<td>1/125</td>
<td>28/125</td>
<td>20/125</td>
</tr>
<tr>
<td>Sustainability</td>
<td>Sustainable Cities Index (Arcadis)</td>
<td>5/100</td>
<td>52/100</td>
<td>43/100</td>
</tr>
<tr>
<td>Real Estate</td>
<td>Cities Momentum Index (JLL)</td>
<td>1/120</td>
<td>n/a</td>
<td>6/120</td>
</tr>
<tr>
<td>Appeal to super-rich</td>
<td>Wealth index (Knight Frank)</td>
<td>1/40</td>
<td>5/10</td>
<td>6/10</td>
</tr>
<tr>
<td>Tourism</td>
<td>Destination Cities Index (Mastercard)</td>
<td>2/132</td>
<td>4/132</td>
<td>19/132</td>
</tr>
</tbody>
</table>

*refer to inside back cover for source, definitions and notes.
due to high demand, population growth and limited investment funding.

- London is not densely populated, with only 5,471 people per square kilometer. Increasing development density in many locations is difficult due to planning requirements. However, some developers are able to significantly increase the density of their development.

- London is ranked 1st as the most important city for ultra-high net-worth individuals in the Knight Frank Wealth Report and is 2nd in AT Kearney’s global cities index describing the world’s most global and dynamic cities.

- London was the most popular tourist destination in the world in 2014 with 18.9m visitors spending £12.8bn ($19.8bn).

**TECHNOLOGY:**

- London is Europe’s leading technology business centre. There are 250,000 digital jobs in inner London. London has more technology jobs in the financial services sector than New York, and currently has 36 active technology sector ‘accelerators’ which promote investment.

- London’s technology infrastructure is weak. Broadband speed in London is ranked 25 out of 33 European cities. Speeds in London are only a third of those in Paris.

- A wireless semantic web network sponsored by the UK Government Smart Cities catapult is being installed across London. The network is intended to support the rollout of the ‘Internet of Things’. London will be an early

<table>
<thead>
<tr>
<th>BUILDING</th>
<th>CENTRAL LONDON</th>
<th>DUBAI</th>
<th>SHANGHAI</th>
</tr>
</thead>
<tbody>
<tr>
<td>High rise offices</td>
<td>3670 - 4690</td>
<td>2000 - 3800</td>
<td>1310 - 1630</td>
</tr>
<tr>
<td>Medium rise offices</td>
<td>3420 - 4260</td>
<td>1350 - 1700</td>
<td>980 - 1310</td>
</tr>
<tr>
<td>Out-of-town shopping centre</td>
<td>2330 - 3420</td>
<td>800 - 1750</td>
<td>n/a</td>
</tr>
<tr>
<td>Underground/ basement car parks (&lt; 3 levels)</td>
<td>1250 - 1960</td>
<td>470 - 780</td>
<td>810 - 1140</td>
</tr>
<tr>
<td>Apartments – standard grade</td>
<td>2510 - 3040</td>
<td>1150 - 1700</td>
<td>760 - 840</td>
</tr>
<tr>
<td>Apartments – luxury grade</td>
<td>3960 - 5550</td>
<td>2000 - 3500</td>
<td>1860 - 2030</td>
</tr>
<tr>
<td>5 star hotel</td>
<td>4610 - 6370</td>
<td>2350 - 4300</td>
<td>2450 - 2940</td>
</tr>
</tbody>
</table>

*refer to inside back cover for source, definitions and notes.*
adopter of the semantic web, driving Big Data applications aimed at improving the city’s efficiency and use of assets.

- Use of BIM in design and construction is accelerating due to Government sponsorship. London developers including Stanhope and British Land are early adopters.

LEGAL:
- The UK legal system is mature and transparent and is relied upon by many overseas investors in managing their global asset portfolios.
- The UK has a well-established specialist infrastructure of property, construction and commercial lawyers who operate in UK and international markets.
- Contracts for construction and appointment of advisors typically use well-established standard agreements as their basis – simplifying commercial negotiations as they represent a widely understood allocation of risk that is backed by insurance products and sub-contracts.
- Contracts have agreed dispute resolution methods, ranging from relatively low-cost and fast adjudication procedures to more formal arbitration and litigation processes for more complex disputes. Adjudication and Arbitration procedures are held privately.

ENVIRONMENT:
- London is ranked 2nd in the Arcadis Sustainable Cities Index (2nd for people, 12th for planet and 2nd for profit).
- London’s air quality is a problem. In a study of 36 cities by Amec, London is ranked 15th.
- London is the 16th most congested city, just behind Beijing according to a study by Tom Tom.
- More than 300,000 homes in London are at risk from flooding according to Environmental Risk Consultancy, Groundsure. (8.5% of households).
- Environmental sustainability policies adopted in London directly influence building design, cost of energy and use of renewable energy. Tenants and investors expect their buildings to have high sustainability ratings using assessments based on BREEAM or LEED.
<table>
<thead>
<tr>
<th>Markets</th>
<th>Low levels of office availability will extend the cycle of rental growth. Residential value is growth steady with markets underpinned by global demand.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>Construction markets growing at 5%+ per annum with the most expansion occurring in London and South East creating resource constraints. Shortages of labour and contractor capacity affect ability to deliver programmes.</td>
</tr>
<tr>
<td>Cost and inflation</td>
<td>Construction prices in London increased by 9% in the past year – inflation easing but still 4-6% from 2015 onwards. General inflation is 0% in 2015 but is expected to rise to 1-1.5% in 2016.</td>
</tr>
<tr>
<td>Contracts</td>
<td>Well-established contract sets widely adopted across the industry enable clients to transfer construction risk. Design and build is the preferred procurement route used to assure delivery quality.</td>
</tr>
<tr>
<td>Building</td>
<td>Building Regulations set national standards. Compliant solutions are proposed by the client’s team and are checked by inspectors. This creates opportunities for innovation. The compliance system is manual.</td>
</tr>
<tr>
<td>Planning</td>
<td>Planning shared by Greater London Authority (GLA) and local authorities. Approval based on technical assessment and political approval.</td>
</tr>
</tbody>
</table>

**FIGURE 4: SUMMARY OF KEY MARKET DIFFERENCES**
<table>
<thead>
<tr>
<th><strong>DUBAI</strong></th>
<th><strong>SHANGHAI</strong></th>
<th><strong>ARCADIS INSIGHT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>High levels of office availability but market is ‘controlled’. Inward investment to ‘safe haven’ and Dubai ‘build-it-and-they-will-come’ policy still fuelling development.</td>
<td>Being a Tier 1 City, Shanghai’s real estate market is still very active despite lower tier cities showing signs of consolidation.</td>
<td>Our presence across global markets enables us to advise inward investors on the local dynamics which affect demand for assets and long-term growth in value.</td>
</tr>
<tr>
<td>Construction market growing at circa 5% per annum with public and private sector investment. Continual investment needed in roads and other infrastructure to enable new development in buildings.</td>
<td>Construction is dominated by the big local Chinese contractors who claim a major share of the market.</td>
<td>Our local knowledge enables us to connect clients with the best local designers and contractors to deliver the job. Our influence helps us to position our clients’ projects as opportunities for the supply chain.</td>
</tr>
<tr>
<td>Construction prices in Dubai increased by less than 1% in the past year. General inflation is at 4-5% according to UAE National Bureau of Statistics.</td>
<td>The rate of growth in capital investment in China is slowing – creating some spare construction capacity. However, labour costs continue to increase and prices remain unchanged.</td>
<td>Our in-depth knowledge of cost and market dynamics in key locations enables us to advise effectively on budget allowances and design and specification decisions necessary to deliver a successful investment.</td>
</tr>
<tr>
<td>Contracts generally FIDIC based and well established. Design-Bid-Build is the predominant procurement route with Design and Build becoming more common.</td>
<td>Standard contract documentation is in place and widely adopted by major developers who are influenced by international cost managers.</td>
<td>We are able to advise clients on the suitability of contracts and contract amendments proposed by clients and their legal advisors.</td>
</tr>
<tr>
<td>Dubai Municipality sets the building code and construction specification requirements. These are subject to individual interpretation. Free Zones have independent Building Control authorities.</td>
<td>Standards are relatively high compared to lower tier cities because of internationalization of quality and influence from MNC developers. Compliant solutions are developed by Local Design Institutes (LDI’s).</td>
<td>The effective interpretation of standards and design of compliant buildings is a great opportunity to optimise development value. Arcadis skills in design and consultancy enable clients to navigate local requirements.</td>
</tr>
<tr>
<td>Dubai Municipality is the main authority for planning. Approval based upon political and technical factors. Rapid approvals and minimum red tape.</td>
<td>Shanghai Planning Bureau has ultimate authority on the shape and size of developments within the city. Rigorous approval process.</td>
<td>Planning requirements are a significant variable for international investors as standards vary so much. Local expertise from Arcadis will help clients to ensure that permitted development is viable.</td>
</tr>
</tbody>
</table>
FACT FILE:

LONDON MARKET DYNAMICS

London is an expensive city. Rents and land values have risen significantly in recent years – a trend that looks set to continue. The London market is similarly associated with quality. The specification and build quality of commercial and residential buildings in London is amongst the best in the world – characterised by excellent technical specification and creativity.

Such a buoyant built asset market translates into high levels of competition for skilled contractors and craftsmen – which has resulted in higher prices for construction. London’s new build and brownfield construction, design, project management, and development industries are indicative of a mature and stable investment destination. Investment also continues to be fuelled by low interest rates.

RESIDENTIAL:

- Prime house prices rose in London by 20% in 2014. But the rate of increase has fallen significantly following the introduction of higher rates of sales tax for high value properties in 2015.
- Residential sales transactions in London increased by 20% to £122 billion ($188.5 billion) in 2014. Non-residential sales were also up by 26% at £43 billion ($66.5 billion).

“New build construction is worth £20bn ($31bn) every year. Prime house prices rose by 20% in 2014 and prime office rents increased by between 8-15% in 2014”
INDUSTRY:

- The new build construction market in London is worth £20bn ($31bn) per annum. Its value grew by over 15% in 2014 and has expanded in real terms by around 40% from the slump in 2009.

- Supply chain management in the city is challenging due to a small pool of suppliers – with no more than 10 major contractors that have the skills and capability to deliver the complex projects on difficult city centre sites that are common in London developments.

- London has a diverse and dynamic market for design consultants. Many are able to specialise in commercial and residential design and have extensive experience of working with London planners and contractors. Local consultants typically provide a high level of service, high-quality design and plenty of creativity, which is an important differentiator in many segments, particularly in the Technology, Media and Telecommunications (TMT) offices market, where buildings can have an important role in supporting business brand and innovative working methods.

COMMERCIAL:

- Prime office rents increased by between 8-15% in 2014. During the same period yields fell to between 3.75-4.4% depending on location.

- Prime office availability in Central London is at a 14 year low according to CBRE.

- According to JLL, both City and West End office markets are still seeing accelerating value growth as a result of both increasing rents and falling yields. By comparison a number of Asian markets are suffering from an over-supply of space, resulting in a weaker letting market. The quality of London’s work and living space is reflected in part by the prices that occupiers are prepared to pay. London is currently ranked the most expensive location ahead of Hong Kong and New York in the Savills’ Live Work Index.
The complexity, cost and desirability of developing in London means there are significant opportunities for investors willing to collaborate. The overall capital pool is made up of Real Estate Investment Trusts (REITs), sovereign wealth funds, private equity players and – increasingly often on large builds – joint venture partners, all with a stake in evolving London’s iconic skyline. As a result, procurement must be carefully considered and managed.

**DEVELOPERS:**
- The London office development market is dominated by a small number of publically listed REITs. The residential market is more diverse, with a growing number of overseas developers directly involved in development – competing with local developers for both sites and contractors. Sovereign wealth and private equity funds are also directly involved in development in the capital.
- London developers increasingly work on joint ventures with overseas development partners to diversify their funding on large and complex opportunities. Most of London’s large towers have been developed by joint venture partners.
- Procurement strategy based on design and build contracts is designed so that clients can define their requirements fully whilst transferring risk to the supply chain.
CONTRACTORS:

- London building contractors are some of the best in the UK and Europe. Many active contractors are UK-only businesses but a number are under foreign ownership. A small number of contractors have a reputation for delivering the most complicated, high-quality schemes and these businesses currently have very full order books. Other contractors focus on the refurbishment and fit-out markets.

- Many London contractors share the same specialist contractor supply-chain, meaning that the actual capacity to undertake construction work is not as diverse as suggested by the number of main contractors.

- Specialist contractors do virtually all construction work in London. Main contractors generally hold the primary relationships with specialist contractors, although some do have in-house capability – typically in piling and building services installations. Developers do not usually have enough workload to be able to support long-term strategic relationships with specialist contractors.

- Typically one contractor will take overall responsibility for the design, the performance of the design team and for construction delivery.

CONSULTANTS:

- Clients typically employ a consultant team to develop the design to assure quality and value. Commercial clients in the UK prefer separate appointments for different services. Under a design and build contract, the consultant team can be novated to the contractor, allowing responsibility for the original design to be transferred to the contractor.

- Architects typically have a leading role in the development of the design and in obtaining planning consent. Aligning the objectives of the architect and the contractor with those of the client throughout procurement and delivery is then a key job for a dedicated project manager. Architects typically leave the final detailed design work to be completed by specialist sub-contractors.

- Structural and building services engineers are typically appointed separately, even though many UK-based engineering consultancies have both capabilities. Engineers typically work under the direction of the Architect but are appointed directly by the client.

- Services engineers are often appointed to deliver a more limited scope of design services than other design consultants. Understanding how the scope of work of different consultants aligns is important to ensure that there are no gaps in the design solution.

- Project managers are appointed by the client and typically manage appointments and monitor progress and production of deliverables against an agreed programme. High performing project managers will act as pro-active problem solvers. Project managers do not typically provide design management services in the UK.

- Quantity surveyors have a pro-active role in commercial development in the UK,
PROCUREMENT CONSIDERATIONS:

- The most common contractual arrangement used for construction in London is design and build (D&B).

- Some clients use package-contracting strategies such as Construction Management (CM) to develop direct relationships with their supply chain. Under CM the client has more control over the project but retains a greater proportion of project risk. Clients who are successful in using the CM route are either well established in the London market, or use a Development Manager who holds the established relationships with specialist contractors.

- Project funders often require risks associated with cost, programme and design, and construction liability to be contractually transferred before finance is released. This can introduce a constraint into the development process by requiring developers and their partners to fund early work such as pre-contract services or enabling works prior to the finalisation of contracts.

- Public sector bodies including Central and Local government, healthcare and transport providers are increasingly encouraged to work in partnership with private sector investors in relation to built asset development – creating further development opportunities.
Finding and acquiring a suitable building site and gaining permission to build are perhaps the most significant challenges in London’s development lifecycle. Investing in the capital requires careful management of a complex and often problematic development equation.

An important aspect of land acquisition and planning in London is its politicised nature. High-profile projects offer attractive yields but can be de-railed at various points by any of a number of interested parties – from members of the public to government ministers.
LAND CONSIDERATIONS:

- Most development in London takes place in previously developed sites, which can involve problems associated with existing structures and contamination.
- London development land is mostly owned privately.
- New land released for development in Central London is almost always brownfield.
- Regeneration is an important agenda for London development. Outside of city centre locations, there are a number of large regeneration opportunities associated with London growth areas, where large-scale investment in job creation and housing will be focused. On these projects, investors should anticipate being required to contribute to infrastructure and place making as part of the master plan. This work is not typically publically funded, and this requirement will have significant implications for development cash flow.

ACQUISITION CONSIDERATIONS:

- There are presently high levels of demand for investment land from UK-based and overseas investors resulting in low yields on land transactions. This means that the landowner takes a large share of development value. In this vein, many transactions are sealed-bid to maximise competitive pressure. Off-market sales and swops present better pricing opportunities for clients with established networks in London property markets.
- Strategic land acquisition without planning consent involves higher levels of risk associated with land-use, permitted density and other more detailed planning conditions.
- Permission for change of use is obtained through a public planning process that is initiated on a case-by-case basis by a developer.
- London development sites are often difficult to develop to their full potential due to constraints such as planning and site irregularity. Given the high levels of demand for land in London there is a risk that developers could pay too much for a site in a competitive bid.
PLANNING CONSIDERATIONS:

• The planning system is highly complex and developments in London need to take account of The London Plan, Local Development Plans as well as conservation areas, protected sightlines and other constraints. Successful outcomes typically require consultation with a broad range of stakeholders including planning departments and special interest groups dealing with conservation, business and community interests etc. Overseas clients need help to make sure that their projects get the best outcome.

• The planning process introduces risk associated with the amount of development allowed on a site as well as the cost of compliance. Factors that might limit the utilisation of a site include existing land use, allowable development density, height restrictions, neighbouring uses and architectural heritage.

• London’s heritage means that many buildings are protected for their historic value. Developers need to take this into account, as the protection may reduce redevelopment options. For example, existing features need to be retained, or buildings on a site cannot be demolished to make way for new development.

• Most planning agreements will include requirements for financial contributions from clients for infrastructure and community facilities, as well as other community benefits such as local employment on the construction project. Residential projects typically require developers to provide low-cost housing as part of the project. The newly elected London Mayor, Sadiq Khan, is being much more proactive in securing a larger share of development as low-cost housing - proposing a 35% contribution for ‘fast-track’ non-contested agreements. An increased share of low cost housing will reduce the end value of the development.

• Planning involves politics as well as technical considerations. Politicians determine planning consents based on recommendations from planning professionals and public consultation. As a result, consents are often granted with extra conditions. The London Mayor can also determine planning decisions on major schemes in London.

• The developer or other stakeholders can appeal any decisions and a senior government minister hears the final appeal. The appeal process is highly technical and relies on planning and legal experts.
APPLICATION (OUTLINE OR FULL)*

LOCAL PLANNING AUTHORITY PUBLICISES AND CONSULTS ON APPLICATION

APPLICATION CONSIDERED BY PLANNING OFFICER OR PLANNING COMMITTEE AND DECISION MADE

PERMISSION GRANTED

PERMISSION REFUSED

PERMISSION GRANTED WITH CONDITIONS

RIGHT OF APPEAL TO THE SECRETARY OF STATE

START WORK WITHIN TIME LIMIT, AND COMPLY WITH CONDITIONS

PERMISSION REFUSED

PERMISSION GRANTED

CHANGE PROPOSAL AND SUBMIT NEW APPLICATION

CALLED IN BY MAYOR
Fact File: Cost of Construction

London is one of the world’s most expensive locations to build. The average construction cost for a range of buildings is currently 1% higher than Hong Kong, but 10% lower than New York.

Scarcity of labour is a key driver of high construction costs in the capital – with contractors lacking the right people to win work competitively and deliver on the volume of projects on site. Similarly, demand for commercial and residential space significantly outstrips supply in London – pushing rents and asset values higher and higher.

- Central London costs are between 30-40% higher than average UK levels. This large disparity reflects a difference in target markets, building complexity, quality levels, labour costs and difficulty working on city centre sites.
- Construction prices have risen by at 18 to 22% since 2013. High construction inflation has been a result of a rapid recovery in demand driven by residential and commercial markets. Prior to 2013 a deep recession resulted in prices falling by over 25% from their peak.
- Currently, inflation has stalled as a result of uncertainty resulting from the Brexit result. Clients are still competing for scarce contractor capacity, but the volume of opportunities is falling in the short term and we expect to see prices fall by around 5% in 2017. However, capacity is still tight and we expect inflation to return from 2018/19 onwards.
- High prices for construction are no guarantee of a high calibre project team in the current over-heated market. Alternative approaches to construction such as off-site manufacture are also affected by capacity shortages, so there are very few options available to increase capacity in the current market.
- Main contractors also must compete between themselves for scarce specialist contractor capacity. We believe that more capacity will emerge in 2017 as growth in new project opportunities slows.
- The availability of construction labour is also a big challenge in London construction markets. Contractors rely upon migrant labour from Europe for up to 50% of the construction workforce. Exit from the EU might make it harder to recruit an overseas workforce and contractors are lobbying hard to get a good Brexit deal. As a result, clients in London must take steps to ensure that projects are attractive to suppliers.
“Construction costs have gone up by 9% in the past year and are between 30-40% higher in London than the UK average”
FACT FILE:

KEY REGULATION

Several strands of regulation govern what, how and where London’s land and assets can be developed. These policies are designed to protect the city’s design heritage, encourage creativity, safeguard people and sustainability, and to provide world-class space for clients, occupiers and residents.
CONTRACTUAL ARRANGEMENTS:

- The UK legal system is based on a combination of statute and precedent. Statutory requirements include, for example, health and safety requirements that are enforceable by criminal law. Precedent is set by court determinations and influences the way in which contracts are applied and interpreted.

- Standard appointment and contract documents are available for professional appointments, construction contracts and sub-contracts. Professional institutions representing architects (RIBA), surveyors (RICS) and Engineers (ICE, ACE and others) produce standard documentation. The CIC (Construction Industry Council) has produced coordinated appointment documents for the professional team. Standard contracts typically aim to balance the allocation of risk evenly between client and contractor.

- In the London market many developer clients will use purpose-written or heavily amended contracts and agreements to secure an enhanced level of risk transfer, including for example a guaranteed maximum price for the construction work, or extended responsibility for design performance.

- There are two main publishers of construction appointments and contracts. The Joint Contracts Tribunal (JCT) publishes a family of construction contracts including design and build and complex contract variants. JCT is popular with private sector clients. The New Engineering Contract (NEC) is a family of professional service contracts, construction contracts and associated agreements. NEC contracts are modular and can be easily adapted to the specific needs of the project. Infrastructure clients and the public sector mostly use NEC. Other organisations that produce contract documents include the ACE and the CIC.

- Other standard documents include warranties for employers, funders and purchasers of developments.

- Payment for professional services is typically made with reference to a pre-agreed drawdown schedule. Construction contracts normally include arrangements for payments to be valued on a Work in Progress basis. Payment processes for construction contracts must comply with statutory security of payment requirements which include maximum payment periods of 30 days. Other practices that are not permitted in the UK include ‘pay when paid’ and unilateral withholding of certified payments.
BUILDING CONTROL:

- In the UK the quality and safety of construction work is governed by building regulations, which set performance standards that cover areas including fire safety, ventilation, drainage, energy efficiency and electrical safety. There are no extra requirements for seismic or storm loadings in London, but fire safety regulations require additional measures for tall buildings that are common in the city.

- Most of the building regulations only set performance standards. It is up to clients and their project teams to select the best way of meeting these standards. This creates opportunities for clients to optimise the design of their project, but also means that standard solutions are not commonly adopted. Designers tend to develop unique solutions to common problems.

- Local authorities or private approved inspectors are required to certify that the design and construction work complies with regulations. Non-compliance can result in fines and enforcement notices, and could delay the occupation of the building.

- Although most of the regulations are cost neutral, requirements for lower carbon emissions have progressively increased construction costs associated with heating, cooling and lighting. Current environmental standards are not expected to be made more stringent.

- In addition to mandatory environmental performance standards, the UK has a voluntary environmental standard, BREEAM, which uses a points based system to assess design and constructed performance of non-residential buildings. Criteria include carbon emissions and occupier comfort. Differences with LEED include the assessment process and performance criteria – based on European rather than US standards. In London, BREEAM ‘Excellent’ has become the default standard for high-performing office buildings. BREEAM ‘Outstanding’ office buildings are highly differentiated in the occupier market.
UTILITIES & CRITICAL SERVICES:

- London’s infrastructure is used very intensively and there is limited additional capacity. Therefore, new development may need to fund extra infrastructure capacity such as on-site rainwater storage.

- Green development policies in London require the use of sustainable drainage and some elements of on-site energy generation. These can add additional costs to projects, but contribute to sustainable ratings, such as BREEAM, so can add value.

- An example of the constraint that a developer might face includes restriction on discharging more surface water into drains than previous uses, which usually requires expensive on-site storage and attenuation.

- New electricity connections are either provided by the regulated utility – UK Power Networks – or by an independent provider. All of London’s distribution is underground and costs of connection are relatively high. In addition, not all work is procured in competition and as a result can be delivered at premium prices.
I’d like to make a long-term investment – is the market suitable?

London is one of the world’s most open and international property markets. Large numbers of transactions and high levels of institutional investment make the market both liquid and transparent – an attractive combination for investors. But London’s success means that demand for assets and prices are both very high, resulting in yields below 4% on many assets.

Property in London will provide long-term income and capital growth. However, investors with a greater appetite for yield – and risk – are turning to secondary assets in smaller UK cities where returns are still relatively high.
Readily developable land is scarce in London and complex planning means that developers often take big risks. But those willing to take a chance, stand to make big returns when buying sites for development. Current prices are driven by expectations that income and values will grow robustly, and record prices are being paid for some sites in the capital – fuelled by its bid buying process.

To ensure that you are not paying too much for a site, use a robust and realistic viability assessment – driven by latest market insight and data – and a rigorous governance process. It is also crucial to consider any potential restrictions in terms of planning, labour and so on, and to have a realistic idea of how potential complexities associated with a site could drive cost up and erode return.
OPPORTUNITIES

I HAVE BOUGHT AN EXISTING PROPERTY. HOW DO I GET THE MOST OUT OF MY ASSET?

There are many options for owners to improve the performance of an asset, depending on its type, income streams, location and many other factors. However, high expenditure is not always necessary to reposition an asset in its market.

Advisors that understand the full range of issues associated with an asset lifecycle will be able to identify a range of options drawing upon knowledge and insight to enable informed choices on the balance between asset-holding, expenditure and exit strategy.
The London property market offers a diverse range of investment opportunities with different entry and exit strategies, risk profiles and levels of transparency. Sub-markets within London enable investments to be carefully targeted to deliver the best returns aligned with risk appetite. The market changes quickly and new opportunities are emerging, including private residential rent and lower cost for sale housing development in Outer London locations. Investors have a lot to gain from keeping up with the latest opportunities.

WHAT IS THE RIGHT ASSET CLASS FOR MY INVESTMENT?
CONCLUSIONS:
CAPITALIZING ON OPPORTUNITIES IN LONDON
London is a leading global city with the will to develop world-class buildings. Its political landscape, supply chain, planning and regulatory system generally support development of outstanding real estate – the iconic buildings of the future.

However, investors must also be mindful of eroding returns. Over-paying for sites that are difficult to develop, becoming subject to intense competition for land and assets, losing control of planning processes to multiple stakeholders, and escalating construction costs all represent key risks to yield.

To combat these risks it is essential to commission an efficient, economical and optimum design that meets the needs of the target market and accommodates the challenges of the site. The need to ensure our buildings not only look good but also meet the numerous needs of occupiers, owners and investors is more acute than ever. Considering the social, economic and environmental impact of structures, our people strive to improve the value of the built environment through exceptional quality design that is built to last. Appointing a London-based consultant with the necessary skills, experience and contacts to navigate the complex investment landscape is also a sensible option for generating the best possible outcome.
Arcadis is the leading global design and consultancy firm for natural and built assets. Applying our deep market sector insights and collective design, consultancy, engineering, project and management services, we work in partnership with our clients to deliver exceptional and sustainable outcomes throughout the lifecycle of their natural and built assets. Please visit: www.arcadis.com

London has a strong Arcadis presence – with approximately 2,000 employees in 5 offices generating over £200 million ($310 million) worth of revenue annually. London aims to be the best big city in the world but faces a number of challenges. We are working with our clients to respond to these challenges to deliver sustainable competitive advantage.

Arcadis has unparalleled experience working with clients in London and beyond. We can genuinely say that our experts have and will continue to influence the development of built and natural assets. We have supported Shell, Tube Lines and Sellafield Ltd to reach impressive safety records. We have been involved in all major UK rail programmes since the 1980s, including the Jubilee Line extension, West Coast Main Line, Thameslink, Crossrail, IEP, HS1, Northern Hub, HS2, and London Euston redevelopment. We work with Thames Water, Network Rail, Crossrail 2, Thames Tideway Tunnel, Imperial College London and overseas investors and developers to help them maximise the value of their assets and investments.

### ABOUT ARCADIS

#### YOUR EXPERT GUIDE IN LONDON & WORLDWIDE:

<table>
<thead>
<tr>
<th>NAME OF PROJECT</th>
<th>LOCATION</th>
<th>INVESTOR/ DEVELOPER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battersea Power Station</td>
<td>Battersea, London</td>
<td>SP Setia (Malaysia)</td>
</tr>
<tr>
<td>St John’s Wood Square</td>
<td>St. John’s Wood Square, London</td>
<td>Usaha Tegas (Malaysia)</td>
</tr>
<tr>
<td>Canadian Embassy</td>
<td>Grosvenor Square, London</td>
<td>Lodha (India)</td>
</tr>
<tr>
<td>Sampson and Ludgate House</td>
<td>South Bank London</td>
<td>Temasek (Singapore)</td>
</tr>
<tr>
<td>150 Bishopsgate</td>
<td>Liverpool Street London</td>
<td>UOL (Singapore)</td>
</tr>
<tr>
<td>Greenwich Peninsula</td>
<td>Greenwich London</td>
<td>Knight Dragon Hong Kong (China)</td>
</tr>
<tr>
<td>Peninsula Hotel London</td>
<td>1-5 Grosvenor Place</td>
<td>Grosvenor and Hong Kong Shanghai Hotels Group (China)</td>
</tr>
<tr>
<td>Chelsea Barracks</td>
<td>Chelsea London</td>
<td>Qatari Diar (Qatar)</td>
</tr>
</tbody>
</table>
KEY FIGURES

ARCADIS:

- 27,000 people worldwide
- €3 billion in revenues globally
- 3,500 people in the UK

**FIGURE 1:**

Data source:

2014
- Dubai GDP – report of Annual Investment Meeting – UAEinteract 31/03/2015
- Dubai GDP Growth – trading economics
- Dubai transport numbers Dubai RTA reported in 7 days.ae

**FIGURE 2:**

Criteria definitions:
- Competitiveness – overall assessment of performance including the economy, R&D, culture and the environment based on published indices.
- Sustainability – balanced assessment of economic, social and environmental sustainability based on published indices.
- Real estate momentum – combines short-term market indicators describing demand for real estate with long-term measures of the attractiveness of a market based on innovation, education and so on.
- Attraction to the super-rich – informal comparison of city attraction based on factors that attract Ultra-High Net-Worth Individuals such as business activity, lifestyle and concentration of the wealthy.
- Tourism – measures the number of tourists and their spending habits.

**FIGURE 3:**

Notes:
- Costs are current in 4th quarter 2016 based on average exchange rates in the quarter
- Office costs include the developer’s finish but exclude tenant’s fit-out
- Hotel costs include FF&E
- All costs exclude allowances for external works, professional and statutory fees and local sales taxes.
- Rates are calculated on the basis of gross internal floor area.
CONTACT:

Peter Hogg
City Executive - London
T +44 (0)7831 626 714
E peter.hogg@arcadis.com

John Williams
UK Regional Leader
Buildings Business Line
T +44 (0)20 7812 2000
E john.williams@arcadis.com

OTHER GUIDES IN THE CITY INVESTOR SERIES: