



Bristol Arena Value for Money Assessment: Summary conclusions

**KPMG report for Bristol
City Council**

June 2018

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1 An Arena in Bristol: Value for Money review

1.1 Scope of work

KPMG was commissioned by Bristol City Council (“BCC”) to undertake a value for money review of the Bristol Arena project. The study is intended to provide an evidence base for BCC to allow it to make future decisions on the investment in line with its duty of best value.

KPMG’s initial scope was to review the proposed Arena at Temple Island (the “Temple Island Arena”). During the course of our review this scope has been extended to consider alternative proposals for an arena at the Brabazon Hangar in Filton (the “Filton Arena”) brought forward by YTL Developments UK (“YTL”) acting as developer and alternative plans for a mixed use residential and commercial development at Temple Island. The full scope of our review, including its limitations, are set out in the body of three reports provided to BCC each covering one of the developments¹. This document summarises the key findings of our reports and should not be read in isolation of our full reports.

BCC is faced with multiple decisions that are separate but heavily interdependent:

1. Does BCC proceed with an arena at the Temple Island Site or pursue an alternative mixed use development for that site?
2. If an alternative arena site to Temple Island does not have certainty of being developed within a reasonable time period, how does this impact the decision for the Temple Island site?
3. If an alternative mixed use development is pursued, is the Filton Arena development sufficiently attractive to warrant working on an exclusive basis with YTL for six months to further refine proposals?

We have summarised the key conclusions from our three reports in the following section.

1.2 Value for Money conclusions

Below we set out the key value for money conclusions from our three reports. We highlight that the analysis completed on the Filton Arena and the alternative mixed use development at Temple Island is high level as both options are at earlier stages of development than the plans for the Temple Island Arena. It will be important for BCC to continue the necessary due diligence and assessments to ensure a sound cohesive economic development plan to support the decisions they wish to undertake. However, the key points from each of our reports that we would like to highlight are as follows:

- In net terms, the direct, indirect and induced impact of the operation of the Temple Island Arena, wider spending of attendees and catalytic development could generate Net Present Value (NPV) of Gross Value Added (GVA) of approximately £387.1m and up to 660 Full Time Equivalent (FTE) jobs in the West of England over 25 years. This provides justification for the use of public money for a lower than commercial rate of return.
- The social and economic case for an arena in Bristol is clear and well made, enhancing economic output and having a positive cultural impact. However, the strategic case for the arena at the Temple Island site has been weakened since the FBC was submitted. The changes to the strategic plans for the City, as well as BTQEZ and the University of Bristol’s purchase and

¹ Temple Island Arena: Value for Money Assessment, Assessment of alternative plans for an arena in Bristol, and Assessment of alternative development plans for the Temple Island site.

development of the remainder of the Temple Island site and the Post Office sorting depot site, has weakened the likely catalytic impacts of the Arena being located on this site.

- The projected capital cost of the Arena is materially higher than the approved budget to date, at £156.3m versus £123.5m (an 18% increase or £32.8m). KPMG note that the Arena would be one of the most expensive Arena's in the UK in terms of cost per square metre based on benchmarking information prepared for BCC by Aecom.
- The Arena will be entirely publicly funded with a mix of BCC capital contribution (£25.9m), the opportunity cost of the land for the site (estimated value at £12.5m) and a further loan (of £145.0m) obtained by BCC. £53m of the loans and associated interest costs are repaid through funding from the LEP provided over 18 years. The remaining BCC loan is serviced from lease payments from the Arena operator to BCC and car parking income. Current financial forecasts show that returns are broadly sufficient to service the additional PWLB loan and make repayments to a level where the residual value of the Arena debt at year 25 is marginally higher than the estimated debt outstanding. Whilst appropriate construction cost contingencies have been made and the contractual structures mitigate risk to the extent that is commercially reasonable, the level of financial return does not represent a commercial rate of return for the residual risks being taken.
- The competing development plans for the Temple Island site through mixed use development have the potential to deliver a materially higher economic benefit to the City. The mixed use development proposals can be expected to deliver GVA of £875.3m (in NPV terms) and deliver 2,026 full time equivalent jobs. Combined with the lower requirement for public funding, this means a BCR for the competing plans of 23.0:1 versus 3.2:1 for the Temple Island Arena.
- The alternative plans for Temple Island also contribute towards the strategic aims of the City, although not necessarily the same ones as the Arena development. Specifically they would contribute towards the delivery of new housing, including affordable housing; the development of a diverse economy that offers opportunity to all and makes quality work experience and apprenticeships available to every young person linked to the creation of new employment spaces and associated jobs; and reducing social and economic isolation and helping connect people to people, people to jobs and people to opportunity.
- Importantly, the mixed use development proposals are at an early stage in development planning and hence are not comparable from a deliverability perspective to the Temple Island Arena plans. Whilst sensible steps have been taken with professional advice from external third parties, this does not compare to tendered contractual positions for the Temple Island Arena. This creates a higher degree of deliverability risk, although this is not unusual for a project at this stage in development.
- Should a decision be taken not to proceed with the Temple Island Arena, BCC has the option to pursue a proposal for a privately funded and owned Filton Arena, being brought forward by YTL Group. YTL's development proposals are in their infancy so it is not possible to conclude on their deliverability. Significant risk remains as to the commercial and technical deliverability because of the early stage of development. It is noted that commercial return from the Filton Arena itself is not the primary objective for YTL, as they stand to benefit from the location of the Filton Arena to surrounding housing development that they are planning and associated transport links that would be put in place. This helps but does not fully mitigate the commercial deliverability risk
- The 16,000 seater Filton Arena would not require any direct public funding, however subject to approval and the reallocation of the LEP funding, £53m could be used to fund transport upgrades. Providing this repurposing of the LEP funding is permitted, there should be no cost to BCC. BCC may wish to take a minority equity stake (subject to agreement with YTL) in the Filton Arena to exert a greater degree of control and influence over operations.

- Based on employment and attendee projections provided by YTL, which are not at a sufficiently advanced stage in development to be ready for detailed due diligence, economic and employment impact of the Filton Arena will exceed that of the Temple Island Arena. There is a reasonable degree of caveat on those projections because of their stage in development. Apart from location specific impacts, the strategic benefits of the Temple Island Arena would transfer to Filton. Because of location, there would be some leakage of economic benefit outside of Bristol, but retained in the West of England area.

In summary, BCC's decision to proceed with the Arena balances relative priorities of generating the best economic and employment value from the Temple Island site; meeting different strategic and public priorities and propensity to invest a material amount of public funding into an Arena with some risk. The Filton Arena plans give an opportunity to deliver an arena in Bristol if alternative plans for Temple Island are pursued, although given the infancy of development plans there remains a higher degree of deliverability risk in those proposals.

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Assessment of alternative plans for an arena in Bristol

**A KPMG report for
Bristol City Council**

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1 Executive summary

1.1 About the study

KPMG was appointed by Bristol City Council (“BCC”) in 2017 to perform a Value for Money (VfM) assessment of proposals to develop an arena at Temple Island (“the Temple Island Arena”). During the course of this review BCC informed KPMG of alternative proposals to provide an arena, specifically a private sector led proposition for an arena and complementary facilities, to be located at the Brabazon Hangar in Filton, 5 miles from Bristol City Centre, brought forward by YTL Developments Limited (“YTL”).

This report provides a review of the proposal for an arena within the Brabazon Hangar in Filton (“the Filton Arena”). The KPMG review covers the following main areas:

- A comparative assessment of the strategic case for the Filton Arena versus the current plans for the Arena at Temple Island.
- Identification, and assessment, of the key financial and deliverability risks of the alternative development proposal and the extent of commercial readiness of the Filton Arena.
- An assessment of the strength of the economic case for the proposed Filton Arena, including consideration of ‘additionality’.
- Comparison of the levels of public investment required for the Filton Arena compared to the Arena at Temple Island.

Further details of the proposal for the Arena at Filton, including the size of the development, timelines and funding requirements, and the scope of KPMG’s study are set out in Section 2.2 of this report.

Our study is based on information and data made available to KPMG by BCC and YTL in the period up to 11 May 2018, as well as various sources of external data, such as from the Office for National Statistics (ONS). A list of the information and data provided to us is set out in Section 2. All KPMG analysis has been conducted based on the data provided. KPMG cannot be held responsible for the integrity of the data provided nor for any gaps in the evidence base.

It should be noted that as the development plans for the Filton Arena are still in relatively early stages of planning, there was limited data and information made available to us. As a result, we have only been able to conduct a high level review based on the available information. As the plans progress, it will be important to revisit the assessment and the findings and conclusions may change.

1.2 Key findings: The strategic case for the alternative development proposals

In general, with the exception of site specific matters, the objectives that BCC has set for the Temple Island Arena¹ could potentially be delivered by the proposed Filton Arena. The BCC objectives for the Temple Island Arena and KPMG’s assessment of the extent to which they could be met by the Filton Arena are set out in Section 3.1 of this report.

As the proposed Filton Arena is a private sector led development, BCC may have limited control over the delivery of some of the objectives, particularly around the quality of design and accessibility of the Filton Arena. There may also be more limited scope to achieve wider BCC objectives for Bristol, such

¹ As detailed in the FBC submitted to the West of England Local Enterprise Partnership (LEP) to secure funding.

as the delivery of work experience and apprenticeship placements and community engagement initiatives².

YTL's requirements for developing the Filton Arena are that three associated transport upgrades are delivered, specifically Metrobus Extension estimated at £35m capital cost, Metro West 2 (MW2) estimated at £43m and a rail link to Bristol Parkway station estimated at £53.0m by Mott MacDonald's desk top study. This high-level study was for twin tracking but subsequent discussions indicate this may not be necessary, in which case BCC estimate the cost will be significantly lower.

We understand that public funding is already set aside or committed for the Metrobus Extension and MW2 projects irrespective of the Filton Arena going ahead. All three infrastructure projects are at an early stage of development and therefore there remains a risk that costs to the public sector are greater than currently expected.

Figure 1: Summary of Public Sector Funding and Financing contributions to the Arena options

£m nominal	Temple Island Arena	Filton Arena
BCC Capital Contribution	£25.9m	-
LEP Funding ³	£53.0m	£53.0m
Value of land contributed	£12.5m	
Total Public Sector Funding	£91.4m	£53.0m
Net Level of PWLB finance required (excluding amounts repaid through LEP funding) ⁴	£92.0m ⁵	-
Total Public Sector Funding and Financing	£183.5	£53.0m

Source: BCC, KPMG analysis.

Subject to the reallocation of the £53.0m of LEP funding being approved, up to £53m could be directed at local infrastructure improvements and not the Filton Arena itself. BCC has told us that YTL has agreed that this represents a cap on the public sector's funding for this project. This compares to £91.4m of public sector funding for the Temple Island Arena, in addition to a further £92.1m of borrowing from Public Works Loan Board (PWLB). The borrowing that is required to fund the Temple Island Arena exposes BCC to greater risks. These risks come in both the servicing of the debt during, and the residual value of the site at the end of the concession. Additional borrowing for an arena exposes BCC to greater risk and the financial return from the Temple Island Arena is not sufficient to fully compensate for this risk if priced on commercial terms. Please refer to our Temple Island Area: Value for Money Assessment report for further detail on the commercial strategy for the Temple Island Arena.

If the alternative developments are deliverable, there is now a weaker strategic rationale for public sector intervention of the proposed Arena project on the Temple Island site.

² We note that YTL has indicated that it would develop a community engagement plan should the development progress. However, there is no certainty at this stage that it would be delivered or what it would include.

³ LEP funding is used to repay PWLB loan finance over the first 18 years of operation for the arena at Temple Island. For the Filton Arena, the funding is used toward the cost of transport infrastructure in the Filton area. All LEP funding is subject to approval by the LEP and a decision by BCC to use that funding for this purpose.

⁴ PWLB Finance shown net of LEP funding contribution toward debt costs.

⁵ Totals may not appear to sum correctly due to rounding differences.

1.3 Key findings: Financial and deliverability risks and commercial readiness of the proposal for an Arena at Filton

Limited financial and commercial information about the proposed Arena at Filton has been provided to KPMG. KPMG's commercial and financial review is based predominately on conversations with BCC and YTL executives. KPMG had limited access to information such as detailed financial analysis, cost plans and third party reports. We would expect further information to become available to BCC as the scheme develops, including information on YTL's ability and commitment to fund the development, the scheme cost and the car parking strategy.

The proposal is subject to a higher level of delivery risk in comparison to the Temple Island Arena due to it being at an earlier stage of development. Significant further work needs to be done by YTL in relation to development cost, returns, specification and commercial structure. YTL has provided KPMG with technical advisor reports noting the technical feasibility of the Arena within the Brabazon Hangar. It is outside the scope of KPMG to assess the reasonableness of these reports.

Whilst no detailed financial forecasts have been provided to KPMG, YTL acknowledge that the commercial feasibility of the Filton Arena is limited in its own right (it is unlikely to generate a commercial level of return, although YTL forecast it will pay back the initial investments within 15-20 years). YTL expect that the Filton Arena and associated transport infrastructure upgrades will have a catalytic effect on the YTL owned residential development surrounding the Arena that makes this financially worthwhile for them. Given they note £1.5bn of development in the area, this is plausible, although no analysis has been provided to KPMG to quantify this.

Set against this is the desire of YTL to become a leading UK property developer, with the Filton Airfield and Arena development being a flagship for its ambitions. It also intends to retain a long term interest in the existing site and operate the Arena, which better aligns its interests with those of BCC compared to developing the sites and then exiting to other investors.

If successful, YTL's proposal delivers an arena with limited financial risk to BCC. The opportunity to use private capital to fund an arena is rare in the UK and we understand is driven by YTL's broader project at the Filton Airfield, as well as its desire to grow its UK property development business. Nonetheless the lack of control over the development means that, in a worst case scenario, for example where cost overruns threaten commercial viability, YTL could walk away from the development, leaving Bristol without an arena.

YTL is a global infrastructure and real estate developer and has indicated it has the financial resources required to fund the £100m required to develop the Arena and the associated public realm works, alongside its wider Filton Airfield project. YTL has a high quality credit rating from a Malaysian credit rating agency of AA1, which we note is investment grade and over £2.4bn in cash on its balance sheet at the time of the latest audited recent financial year end.

YTL has indicated that an assumption of their development of the Filton Arena is agreement to the following major infrastructure projects. This will have a public cost. The estimated cost of these infrastructure projects is set out in Figure 2 below.

Figure 2: Summary of supporting infrastructure works for the Filton Arena

Project	Total capital cost (£m)	Existing funding already committed (£m)	Additional public funding required (£m)
MetroWest 2 – Rail Extension to Bristol Temple Meads ⁶	43.0	43.0	-
Metrobus Extension – Phase 2 ⁷	35.0	35.0	-

⁶ Based on information provided by BCC Transport Team

⁷ Based on information provided by South Gloucestershire Council

Bristol Parkway Extension ⁸	53.0	-	53.0
Publically Funded Infrastructure	131.0	78.0	53.0
Station enhancement works ⁹	10.0	-	- ¹⁰
Total	141.0	78.0	53.0

Source: BCC, KPMG analysis.

These projects are at varying levels of development, with MetroWest 2 and Metrobus Extension planned and funded to an agreed level. These figures are Network Rail GRIP Stage 2/3 and may well increase or decrease during the further development stages. The Bristol Parkway extension costs are based on a high level study from Mott McDonald, which assumed twin tracking but subsequent discussions indicate this may not be necessary, in which case BCC estimate the cost will be significantly lower. The design development and costs will be subject to further revision as the scheme progresses.

Decisions have not been made as to the source of this public funding in the event that BCC elected to proceed with the Filton Arena, although it is noted that if the Arena does not proceed at Temple Island then £53m of Local Enterprise Partnership (LEP) funding will be saved that could potentially be repurposed, subject to LEP funding approval and a revised business case. BCC has informed us that it has advised YTL, that its commitment to fund infrastructure works will be capped at £53m so any cost increases would be met by YTL (subject to contract). This will limit BCC's exposure to cost overruns across the agreed infrastructure works. Completion of these three infrastructure projects will have benefits beyond the proposed Filton Arena, although assessment of those further benefits is beyond the scope of KPMG's work.

YTL has indicated that to progress plans to a greater stage of commercial readiness, they require a six month exclusivity period. This is necessary to give YTL a reasonable basis for spending a considerable amount of money to develop a detailed scheme. YTL has informed us that in order to secure outline planning permission, it will need BCC not to progress with the Temple Island Arena to satisfy the sequential test requirement. At that time, YTL's bargaining position with BCC will be strengthened and so seeking firm commitments from YTL where possible should be prioritised. In particular, contractual commitments from YTL to the Filton Arena should be put in place prior to committing any further public funding to the transport infrastructure upgrades.

1.4 Key findings: The economic assessment of the proposed Filton Arena and Value for Money

KPMG estimates the potential Gross Value Added (GVA) and employment that could be generated through:

- the construction of the Filton Arena;
- the operation of the Filton Arena, including the indirect and induced impacts associated with the supply chain and employees' spending of wages in the wider economy;
- the additional spending of the attendees to Filton Arena events; and
- the potential business rates income to be received by BCC from the Filton Arena.

KPMG's economic assessment is predicated on the deliverability of the scheme and the achievement of YTL's projections in terms of employment and attendees. It should be noted that there was limited information available from YTL on which to base our analysis, so a high level appraisal approach was adopted. Therefore, **the results should be viewed as indicative only**. We note that YTL's projections for both direct employment and attendees are considerably higher than the forecasts for

⁸ Per Mott McDonald study estimate, which was for twin tracking but subsequent discussions indicate this may not be necessary, in which case the cost will be significantly lower.

⁹ BCC estimate – no supporting evidence provided.

¹⁰ Whilst BCC estimate a further £8m to £10m is required to enhance the new station at Filton. YTL has agreed that it will fund these works and are in discussions with NR about the scope and costs, which still need to be confirmed.

the Temple Island Arena. This may be linked to the higher capacity and number of events at the Filton Arena.

A summary of the estimated net GVA impacts (in Net Present Value (NPV) terms¹¹) and employment (in Full-Time Equivalent (FTE) terms¹²) is shown in Figure 3.

Figure 3: Net GVA (in NPV terms) and employment (in FTEs) associated with the proposed development of the Filton Arena over 25 years

		Net GVA	25 years Net employment	Business rates
West of England	Construction	£66.6m	83	-
	Arena operation	£192.1m - £202.9m	254 - 301	£8.8m
	Attendee spending	£551.9m - £627.0m	975 - 1,111	-
	Total	£810.6m - £896.5m	1,312 - 1,495	£8.8m
Bristol	Construction	£59.7m	74	-
	Arena operation	£183.9m - £193.7m	248 - 294	£8.8m
	Attendee spending	£485.7m - £551.8m	858 - 977	-
	Total	£729.3m - £805.2m	1,180 - 1,345	£8.8m

Source: KPMG analysis

Our analysis of net impacts is at the West of England level. At the Bristol level there may be a degree of “leakage” of economic impacts outside of Bristol given the location of the Brabazon Hangar outside of the City Centre on the border with South Gloucestershire. In particular, as we detail in Figure 20 in the main body of the report, we consider that Arena attendee spending (and the direct economic activity associated with this) may be concentrated more closely around the Filton site, including within the Filton Arena development, than may be the case if the Arena were located in the City Centre. We note, however, that YTL has agreed to work with BCC and Destination Bristol to set up ticket packages, including City Centre hotels, parking and transport, for the Arena events. This may mitigate the leakages from the City Centre of Filton Arena attendee spending to some degree.

In addition to the estimated economic impacts detailed in

Figure 3 above, YTL has stated to KPMG that the Filton Arena development could have a catalytic impact on the wider site – bringing the development forward more quickly by raising the profile of the Filton site across the West of England region, as well as nationally¹³. It considers that the Filton Arena project would effectively “kick-start” the wider development and could drive a higher development rate, particularly for the residential developments, although is unable to quantify the potential impacts of this.

There is also the potential for the development of the Filton Arena to catalyse the development of the East and West Bays of the Brabazon Hangar. However, given a lack of certainty around the timing of redevelopment and the potential use, we have not estimated the economic impacts that would be associated with this. We note that if the Filton Arena were to catalyse their development it would add to the overall economic case for the Filton Arena.

1.5 Summary conclusions

Potential for the strategic benefits of the Arena business case to be met at Filton: With the exception of site specific objectives, the objectives that BCC has set for the Temple Island Arena could potentially be met by the proposed Filton Arena.

¹¹ To estimate the results in NPV terms we applied a social time preference rate (STPR) discount rate of 3.5% for the first 25 years of the developments' operations, based on the HM Treasury Green Book guidance.

¹² This adjusts part-time or temporary staff into an annual full-time equivalent based on the proportion of full-time hours worked over a year.

¹³ As part of this study we have not assessed what, if any, impact any higher rate of residential development on the Filton site could have on the wider residential market in Bristol and the West of England.

Potential for higher economic impact than at Temple Island: Based on YTL's direct employment and attendee figures, the Arena at Filton delivers a strong economic impact with an NPV of up to £776.9m over a 25 year time frame¹⁴. We note that this is greater than the proposed Temple Island Arena. Given the higher economic impacts and lower public funding requirement it has a higher Benefit Cost Ratio (BCR)¹⁵.

Figure 4: Comparison of the value for money of the Temple Island Arena and Filton Arena at a West of England level over 25 years

	Temple Island Arena	Filton Arena
Total net GVA (in NPV terms)	£489.1m	£744.0m - £829.9m
Capital costs	£148.0m	£53.0m
BCR	3.2:1	14.0:1 – 15.7:1
NPV	£282.6m	£691.0m - £776.9m

Source: KPMG analysis

The higher economic impact results primarily from higher employment and attendee projections associated with the Filton Arena in comparison to the Temple Island Arena. As noted, YTL has provided little detailed analysis to support these estimates.

Some of this economic benefit is outside of Bristol: The analysis above is at a West of England level. At a Bristol level there is likely to be some leakage of economic benefit from the Filton Arena outside of Bristol and diversion of economic impacts away from the City Centre due to location.

Low level of commercial readiness drives deliverability risks: The Filton Arena is at an early stage of planning, and as such, there is a lack of detail as to its deliverability. In particular, we note that, as the detailed design for the Filton Arena is developed, should costs escalate, YTL could choose not to proceed. In addition there are key dependencies on wider infrastructure projects that carry further risk.

KPMG note that YTL's objective for developing an arena at Filton is for wider strategic reasons than financial return from the Filton Arena alone. However, YTL has not provided any comment on the level of financial cost, at which the Filton Arena would become unviable for them.

Supporting infrastructure works costs are subject to potential further cost: There is a high level of uncertainty as to the costs of the supporting infrastructure works, with an additional funding requirement of £53m per preliminary estimates carried out to date. Further work is required to define BCC's financial liabilities in respect of these supporting schemes and its level of commercial risk in delivery. BCC has stated to KPMG that if the reallocation of the LEP funding of £53m from Temple Island to infrastructure upgrades in north Bristol is approved then BCC would look to support the development and delivery of the associated public and highway infrastructure, up to a level of £53m. BCC has stated that any cost increases would be for YTL's account (subject to contract). This principle has not been set out in any formal agreement.

¹⁴ The estimated NPV captures the economic impact generated through the construction, operation and attendee spending associated with the Filton Arena. The NPV does not include any of the wider benefits that may be associated with the transport infrastructure that may be brought forward with the LEP funding, nor does it include any impact from development that is catalysed on the wider Filton site or any quantification of the potential social benefits associated with the arena.

¹⁵ It should be noted that our analysis of the economic impacts of the Filton Arena does not include an assessment of the economic impacts associated with the supporting transport infrastructure package. This was not in the scope of our work. Nor does the BCR capture any of the economic impact associated with catalysed developments on the wider Filton site or the potential social impacts that may be associated with the arena. As a result, the BCR does not reflect the full scope of economic benefits from the additional public sector contribution toward the package. The BCR, therefore, is not a comparative assessment of costs and benefits and is provided for indicative purposes only.

2 About the study

2.1 Development proposals for the Bristol Arena

An arena for Bristol

Bristol is the only UK core city that does not have a major arena¹⁶.

BCC has developed plans, and secured £53.0m of funding from the West of England LEP for a proposed 12,000 (10,000 seated) capacity arena to be situated on the former Diesel Depot site within the Temple Quarter Enterprise Zone (BTQEZ), located close to Bristol Temple Meads train station (referred to as “Temple Island”).

In August 2017, KPMG was commissioned by BCC to undertake a value for money review of this proposed Temple Island Arena project. The study was intended to help to provide an evidence base for BCC to allow it to make future decisions on the investment in line with its duty of best value. However, there are a number of associated factors such as the changes to the Temple Island project, the proposed Filton Arena and the proposed alternative development for the Temple Island site that have changed the value for money of the Temple Island Arena project.

Details of the scope of this study and KPMG’s findings are set out in KPMG’s Temple Island Arena: Value for Money Assessment Report and accompanying confidential Background Document.

In the time period over which these reports were being developed, a private sector led proposition for an alternative arena in Bristol was brought forward by YTL, an infrastructure conglomerate. It has developed a competing proposition to build a privately financed arena in the Brabazon Hangar on its Filton site, 5 miles from Bristol City Centre.

The Filton site, purchased by YTL in 2015, covers a total of 142 hectares¹⁷ to the north of Bristol City Centre and is split across the border of Bristol and South Gloucestershire. The site was formerly used by Concorde as a manufacturing site and airfield.

YTL has already developed plans, and been granted planning permission, for part of the Filton site. It plans to deliver a mixed use development, including 2,675 homes, three schools, a retail centre and 26 hectares of employment space¹⁸.

This approved development does not yet include plans for the Brabazon Hangar, which is a complex of three separate former aircraft hangars: the 13,500 sq m Central Bay and the East and West Bays, both measuring 8,500 sq m. The Brabazon Hangar is on the Bristol side of the Filton site and is within the boundaries of the Filton Enterprise Area.

YTL has proposed that it would develop a privately financed arena in the Brabazon Hangar (“the Filton Arena”). It is proposed that the Central Bay would be re-purposed into a 16,000 seat capacity arena, with a bowl floorspace of approximately 3,000 sq m. Additionally, YTL has suggested that its arena development would include over 5,000 sq m of food and beverage retail space, spread over multiple service outlets, and would have up to 40 corporate hospitality boxes, each with a capacity of 18 people.

YTL has indicated to BCC that it projects that the Filton Arena would attract approximately 600,000 attendees in its initial year, rising up to 1.3 million by its fifth year of operation. It envisages a schedule

¹⁶ Davis Langdon and IPW... (2013) Bristol Arena Outline Business Case: Final Report November 2013.

¹⁷ <https://www.ribaj.com/intelligence/filton-airfield-intelligence-eleanor-young>

¹⁸ <http://www.ytlproperty.co.uk/>

of 75 events in year 1, 90 in year 2, 100 in year 3, 120 in year 4 and 140 events in year 5 and thereafter. YTL has suggested that between 20% and 30% of the events would be large “Big Hero Grade A” events.

The broader development surrounding the Filton Arena sits at the heart of YTL’s rationale to develop an arena there. The Filton Arena and the supporting infrastructure could reasonably be expected to increase the land value of the site both through place-making and the local infrastructure improvements proposed from BCC or the LEP. Furthermore, having a 16,000 seat capacity arena at the heart of the development will, in YTL’s view, give it national recognition, which, as it seeks to become a major force in UK property development, is of significant reputational benefit.

In order to deliver the Filton Arena development, we understand from BCC and YTL that supporting transport infrastructure developments will be required. Specifically, the infrastructure projects that are expected to be delivered include:

1. A rail link between Bristol Temple Meads and Filton stations. This is planned to be delivered as part of the MW2 project.
2. A rail link between Bristol Parkway and Filton North stations. This development is still in the very early stages of planning and will not feature as part of MW2. An initial feasibility into this development has been undertaken by Mott MacDonald and assumed twin tracking but subsequent discussions indicate this may not be necessary. Further work is required to define the scope of works.
3. The Metrobus Extension. This will be part funded through the Cribbs Patchway New Neighbourhood (CPNN) development. YTL will be required to deliver part of the Metrobus Extension route through the Filton Airfield site. YTL has confirmed that this will be delivered to tie in with the opening of the Metrobus Extension.

As a result of additional passenger volumes due to the Arena, station enhancement work is also planned. Further details of this proposed transport infrastructure package is included in Section 4. As we explain in Section 4, we understand that plans to deliver the MW2 and the Metrobus Extension developments are already in place and are likely to proceed irrespective of whether the Filton Arena development proceeds.

In addition to developing the Arena in the Central Bay of the Brabazon Hangar, YTL has suggested that over a longer timeframe, potentially up to 5 years after the development of the Filton Arena, it may also develop the East and West Bay hangars. Further details of these potential developments and wider development that YTL considers may be catalysed through the development of the Arena in Filton are set out in Section 5.3.3.

BCC has indicated to us that if the Filton Arena goes ahead, it intends to make an investment into it. At present, the size and structure is not yet known but BCC is currently working on the assumption of having a £5m equity stake. We understand that this is not a requirement from YTL but that it is open to this commercial arrangement. From BCC’s perspective, this is desirable to be able to exert influence on the strategy and direction of the Arena and to align its interests with YTL, for example by taking a seat on the board.

We understand that YTL has asked BCC to grant an exclusivity period of 6 months to further develop the Filton Arena proposition and develop a detailed design. YTL has informed us that it will require BCC, at some point during or towards the end of that period, to withdraw support for the Temple Island Arena. We understand that this would, in effect, end the prospect of the Arena at Temple Island. YTL has confirmed that it will be in a position to submit an outline planning application within the 6 month exclusivity period.

2.2 Scope of work

In August 2017, KPMG was commissioned by BCC to undertake a value for money review of the proposed Arena on the Temple Island site. Given the YTL proposals that came forward for the Filton Arena development, KPMG was subsequently commissioned to undertake a review of YTL's alternative proposal of an arena in the Brabazon Hangar.

Specifically, KPMG was commissioned by BCC to undertake a further review covering the following main areas:

1. An assessment of the strategic case for the Filton Arena, including consideration of how the proposition affects the strength of the strategic case for an arena and the opportunity to deliver key objectives of BCC, such as housing and employment growth in the respective locations.
2. An assessment of the rationale for public sector intervention to bring forward the Filton Arena and any deadweight¹⁹ associated with the public sector funding requested (i.e. if the Filton Arena could go ahead without the funding, or with lower levels of funding).
3. Identification, and assessment, of the key financial and deliverability risks of the Filton Arena and the extent of commercial readiness of the options, where appropriate with comparison to the existing Temple Island Arena development proposal.
4. An assessment of the strength of the economic case for the Filton Arena development proposal, including consideration of 'additionality', specifically whether there are any potential unintended consequences, such as leakage of benefits outside of Bristol and the West of England and if it may result in any displacement of activity from Bristol City Centre.

Our work draws on information and data made available to KPMG by BCC and YTL in the period up to 11 May 2018. This information and data were made available to us, both in the form of written documents and orally in meetings with the parties. Specifically, we were provided with the following information:

- the proposed capacity and floorspace of the Filton Arena, including proposed food and beverage space and the number and capacity of corporate hospitality boxes;
- the projected attendee numbers and number of events;
- the estimated total construction cost of the Filton Arena development and timeframe for development;
- the estimated number of permanent and causal employees (split by broad category of role), in Full Time Equivalent (FTE) terms;
- YTL's initial thoughts on the marketing of the Filton Arena, including a potential partnership with Destination Bristol; and
- YTL's initial plans for a local sourcing policy and community engagement activities.

Additionally, to conduct our assessment we sourced data and information from a number of external public sources. This includes official statistics published by the ONS, data and information from the Homes and Communities Agency (HCA)²⁰ and existing research, analysis and economic literature from a range of sources.

Given that the alternative development plans for the Filton Arena are still in relatively early stages of planning, there was limited data and information made available to us by YTL for the purposes of our study. For example, KPMG has not had sight of YTL's initial feasibility studies for the Filton Arena development, including any financial projections for the operation of the Arena or development

¹⁹ Deadweight refers to the outcomes which would have occurred without the project being brought forward.

²⁰ The HCA was replaced by Homes England in January 2018.

appraisal. This is not unusual for a project at this stage of development, but there are considerable risks yet to be resolved, particularly with respect to commercial feasibility and deliverability.

As a result, KPMG has only been able to conduct a high level review and VfM assessment of the Filton Arena based on the available information. We would expect that, should BCC grant YTL the exclusivity period it has requested, that BCC would receive further clarity on a number of the outstanding matters. Furthermore, as additional information becomes available and as the plans progress, the underlying data and information our analysis is based upon is likely to change. Therefore, our analysis would need to be revisited and our findings may change as a result.

3 The strategic case for the alternative development proposals

3.1 Rationale for public intervention

The HM Treasury Green Book²¹ states that within the strategic case of a business case developed for a project, policy or programme, the rationale for public intervention should be considered.

The case for public sector intervention in the Temple Island Arena, as set out in the Full Business Case (FBC)²² produced for the LEP as a bid for public funding, is based on three main arguments:

1. It is rare for an arena project to be brought forward by the private sector.
2. The benefits gained from the Temple Island Arena will mostly be public benefits and as a result, the project is not seen as commercially viable for private investors.
3. The Temple Island Arena will act as a catalyst for the development of the wider area. The Temple Island site is a derelict brownfield site which has been vacant for over 15 years with little to no private interest. Therefore, there is evidence that the private sector has not been forthcoming in delivering any developments on the site.

As noted in our Temple Island Arena: Value for Money Assessment Report, it is important to assess the rationale for public sector intervention and how the validity of this rationale may have changed over time. It is particularly important to reassess the strategic rationale for public funding of the Temple Island Arena given that since the FBC, YTL's private sector led proposition for the Filton Arena has been brought forward. If deliverable, and shown to deliver BCC's objectives (as set out in Section 3.2 below) and generate a similar or higher BCR, YTL's private sector led proposition for the Filton Arena weakens the strategic rationale for public sector intervention of the proposed Temple Island Arena.

Our assessment of the deliverability of YTL's Filton Arena proposal is detailed in Section 2 of this report and our assessment of the potential BCR of the Filton Arena is detailed in Section 6.

The proposed Filton Arena development would not require direct public intervention (funding) to bring forward the development of the Arena itself.

However, YTL has stated that it will require public sector cooperation through the delivery of three transport infrastructure packages (detailed in Section 2 above). Two of these infrastructure packages are planned and funded and will go ahead irrespective of the Filton Arena. The third infrastructure project, a rail link between Bristol Parkway and Filton North, is in the early stages of planning. It is possible that, in the event that the Filton Arena is pursued, all or part of the £53m of LEP funding designated for the Temple Island Arena could be repurposed to bring forward this infrastructure. However, we understand from BCC that the decision to proceed with this infrastructure project is not solely dependent on the Filton Arena. It is subject to a separate business case appraisal and would deliver wider benefits to the West of England beyond catalysing the delivery of the Filton Arena. It is not within the scope of this report to assess these wider impacts.

²¹ HM Treasury (2018) The Green Book: Central Government Guidance on Appraisal and Evaluation.

²² Bristol City Council (2016) Bristol Arena Full Business Case.

3.2 Delivery of BCC's key objectives for an arena and for Bristol

As part of our assessment of the strategic case for the proposed Filton Arena, we have considered how this proposal could affect the opportunity to deliver BCC's key objectives for the delivery of an arena in Bristol as well as the achievement of its broader objectives for the City, for example, in terms of housing and employment growth.

To do this, we have considered the objectives for the delivery of the proposed Arena on Temple Island, stated in the FBC²³ submitted to the West of England LEP in 2016 and the extent to which these objectives could be met through the proposed Filton Arena.

We have also reviewed the key stated objectives of BCC in its Corporate Strategy (2018-2023) and considered the extent to which the Filton Arena proposal could deliver against them. This assessment also draws on the review of the objectives of the original Temple Island Arena and their strategic fit, set out in our Temple Island Arena: Value for Money Assessment Report.

3.2.1 Arena objectives and strategic fit of the alternative developments

In the FBC submitted to the West of England LEP as part of the application for the Economic Development Fund (EDF) funding for the Temple Island Arena, BCC set out a number of objectives for the Arena. These objectives are presented in Figure 5 below alongside KPMG's assessment of the extent to which these objectives could be delivered by the proposed Filton Arena.

²³ Bristol City Council (2016) Bristol Arena Full Business Case.

Figure 5: KPMG assessment of the extent to which the Filton Arena may meet the objectives set for the Temple Island Arena

FBC objectives	KPMG assessment
The Arena experience will:	<p>1.1 Create a “return again” experience for its customers.</p> <p>The ability of an arena to create a return again experience is likely to depend on a number of factors, including the quality of events staged and appeal to audiences and the customer experience at events, including accessibility, quality and provision of services such as food and beverages, satisfaction with Arena staff, the quality of the events, etc. In addition, at 16,000 seat capacity, the Filton Arena will be able to attract and host “Big Hero Grade A” performers. Ensuring that the acts the Arena is hosting are in demand, it will contribute towards a return again experience for attendees.</p> <p>As YTL has not yet developed detailed plans for the Filton Arena, it is not possible to fully assess the extent to which it would create this experience. However, we consider that it would be in YTL’s commercial interest to develop an arena that will create a “return again” experience as the commercial success of the Arena will depend, at least in part, on the ability to attract attendees to the Arena. YTL would likely have similar incentives to the operator of the proposed Temple Island Arena in terms of providing attendees with a positive experience in order to encourage repeat visits.</p>
	<p>1.2 Provide a vibrant “Bristol Experience” for visitors to make our Arena different from others.</p> <p>We have not been provided with any details of how YTL plans to differentiate the proposed Filton Arena from other arenas. However, as noted above, its commercial success will depend on being able to attract attendees as well as in-demand acts for its event schedule. To do this it would need to effectively compete for attendees and acts.</p> <p>Also, information provided to us indicates that YTL is in early discussions with Destination Bristol and other Bristol based stakeholders, such as hotels, restaurants or tourist attractions, to develop event package deals to be marketed to attendees. These may, for example, include the option to buy an event ticket with added on Bristol hotel stay. We understand that the intention of this is to create a complete “Bristol Experience” for attendees as well as help to increase the economic impact of the Arena within Bristol.</p>
	<p>1.3 Be at the forefront of Arena programming and content.</p> <p>YTL has stated that it intends to stage a diverse range of events at the Filton Arena, including “Big Hero Grade A” performers. While there is a lack of detail of the event schedule at this stage to assess whether this will be at the forefront of arena programming and content, as noted above, it will be in YTL’s commercial interests to deliver an arena that could effectively compete with other UK arenas both for</p>

		acts and attendees, given that this would support revenue and profit generation. One way in which it may be expected to achieve this is to ensure that the programming and content staged at the Filton Arena is in line with market trends and in demand by audiences.
	1.4 Provide appropriate transport links to match public expectations.	As explained in Section 2, there are plans to develop a transport infrastructure package that will improve accessibility to the Filton site. The MW2 project, which will include a rail link between Temple Meads and Filton; and the Metrobus Extension project will improve the public transport links to the Filton site. In addition, a rail link between Bristol Parkway and Filton North station is currently being considered with an initial feasibility study completed. This project would, however, be subject to the granting of public sector funding and approval of a business case. It will improve infrastructure links for the surrounding area and, should the Filton Arena proceed, provide good transport links for Arena attendees and employees.
	1.5 Provide safe and secure parking when public transport is not an option, providing an option of rapid transit from park and ride sites where appropriate for large scale events.	<p>We also understand from YTL and BCC that there will be provision for car parking for Filton Arena attendees. We consider that this would support the delivery of transport plans to match public expectations.</p> <p>With regards to the development of park and ride sites, KPMG has currently not seen any plans for these. However, we understand that a number of park and ride services are currently being considered by YTL and BCC, in conjunction with South Gloucestershire Council (SGC).</p>
	1.6 Whenever possible and through working with the operator, provide the Council and the public with opportunities to use the facility via a number of community events (subject to cost considerations).	YTL has provided KPMG with initial thoughts on potential community engagement activities that could be undertaken in relation to the Filton Arena. In particular, YTL has suggested that it has the intention to deliver "local minority event productions that may not be commercially viable but deliver a local benefit (subject to agreeing the details)".
The Arena building will:	2.1 Be flexible enough in design to be future-proofed for changes in the entertainment market and to meet Bristol's expectations.	Given the scale of investment that YTL would be making in a long term arena asset, we consider that it likely would be in YTL's commercial interest to develop an arena that is flexible to accommodate changes in the entertainment market and to address market demand (from Bristol attendees and more widely).
	2.2 Be flexible enough to accommodate a wider range of content, including music concerts, family entertainment shows, sports and other events.	Although the event schedule has not yet been developed in detail by YTL, it has indicated that it would plan to stage a range of events, including music concerts and sports events. However, detailed designs for the Filton Arena have not yet been developed, therefore, we are unable to assess the extent to which the design will incorporate the ability to be flexible for different events. We note that at 16,000 seat capacity, the proposed Filton Arena will be one of the

		largest arenas in the UK. As a larger arena, we consider that the Filton Arena will be more likely to be able to accommodate the "Big Hero Grade A" events, which will, typically, not be staged at smaller arenas.
	2.3 Be delivered to budget and to a quality set out in the Employers Requirements.	This objective is very specific to the Temple Island Arena. Employers Requirements have not been developed for the Filton Arena. In terms of budget, we also note that as a private sector development the cost of the project, including any overruns, will fall to YTL rather than BCC.
	2.4 Be special, of a good quality, with an outstanding level of environmental performance.	Detailed designs for the Filton Arena have not yet been developed. Therefore, given a lack of detailed plans we are unable to comment on the quality standards, including environmental performance and accessibility and the extent to which objectives in relation to this may be met.
	2.5 Provide a key piece of cultural infrastructure to enable pathways for progression for artists and performers.	In developing the Filton Arena, this would provide a key piece of cultural infrastructure to allow artists and performers to reach audiences. At this stage, there are no details of how YTL would specifically support the progression of artists and performers.
	2.6 Be accessible and meet the latest access requirements.	Detailed designs for the Filton Arena have not yet been developed, therefore we are not able to assess the accessibility of the Arena. However, in accordance with the Equality Act 2010, YTL will have a duty to make reasonable adjustments to ensure that disabled persons can access goods and services ²⁴ .
The Arena will:	3.1 Raise the profile of the city on the national and international stage.	<p>We consider that the Filton Arena has the potential to raise the profile of the city, given that it would be in YTL's commercial interest to actively market the Arena and deliver a programme of high profile events to attract wide audiences. Furthermore, we understand that it is YTL's intention to market the Arena as a Bristol Arena.</p> <p>However, we note that the Filton Arena's out-of-centre location could result in a proportion of Arena attendees not travelling to Bristol City Centre. At present, there is no information available on the expected travel patterns of Arena attendees so we are unable to assess the extent to which this may occur. YTL has stated that it intends to partner with Destination Bristol and Bristol wide hotels, restaurants and tourist partners to offer event packages to attendees. These plans are still in the early stages of development so there is no detailed information available on the exact packages that would be offered or expected levels of take-up. However, these packages could encourage attendees to travel into Bristol City Centre.</p>

²⁴ <https://www.citizensadvice.org.uk/law-and-courts/discrimination/what-are-the-different-types-of-discrimination/duty-to-make-reasonable-adjustments-for-disabled-people/>

	3.2	Have a public realm interface with the rest of the site, which encourages visitors and creates a “destination” experience for “Arena Island”.	This objective specifically relates to the location of an Arena on Temple Island. Therefore, it is not applicable to the Filton Arena. We note, however, that the Filton Arena would be integrated within the wider development of the Filton site, with public realm improvements included as part of the plans.
	3.3	Deliver jobs to the community during the construction period and then operational period.	In Section 5, we estimate the employment impacts associated with the construction and operation of the Filton Arena. This analysis suggests that the Filton Arena would create jobs in the local area, albeit with potentially higher levels of leakage outside of Bristol (compared to the Temple Island Arena) due to the Filton Arena’s out-of-centre location and proximity to South Gloucestershire.
	3.4	Assist in making the BTQEZ more accessible and drive improvements permeability to the south of Temple Meads station.	This objective specifically relates to the location of an Arena on Temple Island. The Filton Arena development would have no impact on the accessibility of the BTQEZ.

Source: Bristol City Council (2016) Bristol Arena Full Business Case.

In general, with the exception of objectives 2.3, 3.2 and 3.4 which are specific to an Arena on the Temple Island site only, the objectives that BCC set out for the Arena in the FBC are not specific to any one location. Therefore, as we assess in Figure 5 above, the objectives could potentially be delivered by the proposed Filton Arena.

However, as the proposed Filton Arena is a private sector led development, BCC may have limited control over the delivery of some of the objectives, particularly around community engagement and the quality of design and accessibility of the Filton Arena. It could consider how certain obligations could be put in place to secure the delivery of the objectives, for example, linked to granting planning permission, or conditions attached to any equity stake BCC may take in the Filton Arena. We understand from BCC that it is in discussions with YTL regarding activities that could be included within planning conditions and contractual arrangements that would help to ensure the delivery of BCC's objectives for an arena (subject to contract).

3.2.2 Overview of BCC's key stated objectives for the City

In addition to the objectives of the Bristol Arena detailed in the FBC, we have considered the extent to which the proposed Filton Arena creates the opportunity to deliver the broader objectives of BCC.

BCC's Corporate Strategy (2018-2023) ("the Strategy") sets out the key strategic priorities and vision for the City over the next five years. It sets out BCC's "contribution to the city as part of the One City Plan and is [its] main strategic document. It informs everything the council does and how [it] plans for the future"²⁵.

The Strategy has four themes, as stated below:

- "Empowering and caring: Working with partners to empower communities and individuals, increase independence, support those who need it and give children the best possible start in life.
- Fair and inclusive: Improving economic and social equality, pursuing economic growth which includes everyone and making sure people have access to good quality learning, decent jobs and homes they can afford.
- Well-connected: Taking bold and innovative steps to make Bristol a joined up city, linking up people with jobs and with each other.
- Wellbeing: Creating healthier and more resilient communities where life expectancy is not determined by wealth or background."

Within these themes, the Strategy sets out a number of key commitments. Although an Arena in Bristol or the Filton site are not explicitly mentioned in the Strategy, the following key commitments are included:

- "Make sure that 2000 homes – 800 affordable – are built in Bristol each year by 2020.
- Develop a diverse economy that offers opportunity to all and makes quality work experience and apprenticeships available to every young person.
- Reduce social and economic isolation and help connect people to people, people to jobs and people to opportunity.
- Keep Bristol a leading cultural city, helping to make culture, sport and play accessible."

These commitments are relevant to the Filton Arena plans, as we assess below.

²⁵ Bristol City Council (2018) Corporate Strategy 2018-2023.

Our assessment of the extent to which the Filton Arena itself could meet BCC's objectives for the City is largely unchanged from our Temple Island Arena: Value for Money Assessment Report assessment of how the Temple Island Arena could deliver against these.

The key BCC objective for the City that the Filton Arena would deliver relates to the contribution it would make toward BCC's commitment to *"keep Bristol a leading cultural city, helping make culture, sport and play accessible to all"*²⁶, as well as delivering economic activity (to support economic growth) and employment²⁷.

Housing, social and economic equality and social care are key priorities identified by BCC in its Corporate Strategy²⁸ which, largely, the Arena project will not address²⁹. However, we note that:

- As detailed in Section 5.3, YTL has suggested that the development of the Filton Arena would likely have some catalytic effects on its development of the wider Filton site. This site will provide new homes; employment space; a retail centre; public services; and community facilities and recreational spaces³⁰. YTL has indicated to us that after the opening of the Filton Arena, the increased footfall could speed up the development of the wider site, although the potential extent of this is unclear at this stage. As the majority of the housing development on the Filton site will be within the boundaries of South Gloucestershire this would not contribute towards BCC's housing target, but will contribute towards the West of England Combined Authority (WECA) target of building 105,500 new homes by 2036³¹.
- The Filton Arena would be a private sector led development that would not require BCC funding (beyond the funding for the transport infrastructure). Therefore, the BCC funding that would be required for the Temple Island Arena would be freed up. This means that the Filton Arena may indirectly support the delivery of BCC's objectives for the City through the diversion of BCC funding to other priorities.
- Depending on the community engagement plans put in place by YTL and its provision of work experience and apprenticeship opportunities, the Filton Arena could have an impact on social and economic equality. We understand from YTL that it is currently in discussion with education providers to develop specific educational courses, apprenticeships and/or work experience schemes. Any courses, apprenticeships or work experience schemes will be related to activities relevant to the operation of an arena, such as catering, hospitality or facility management. Due to the early stage of the proposals, these community engagement plans are still in development and YTL has not set any target levels for the number of persons who could benefit. However, YTL has suggested that these work experience schemes would be integral to YTL's community engagement plans. It has also suggested that it would work with the Prince's Trust South West to create opportunities for young people across Bristol and the West of England. However, until commitments are in place and targets set it is unclear to what extent BCC objectives associated with social and economic equality may be achieved.

²⁶ Bristol City Council (2017) Corporate Strategy 2018-2023.

²⁷ See Section 5 for our assessment of the potential economic impacts associated with the proposed Filton Arena development.

²⁸ Bristol City Council (2018) Corporate Strategy 2018-2023.

²⁹ The economic and social impacts associated with the arena are assessed as part of our VfM review, although impacts on inequality have not been previously assessed, therefore do not form part of our assessment.

³⁰ <http://www.ytlproperty.co.uk/>

³¹ West of England Combined Authority (2018) Business Plan 2018-19.

4 Financial and commercial considerations for the proposed Arena

4.1 Background

This section reviews the commercial deliverability of the proposed Filton Arena. It should be noted that the financial and commercial elements of the project are at an early stage of development. YTL has taken initial steps to explore the feasibility of the Arena, but our analysis is based primarily on conversations held with YTL, with limited third party documentation or supporting evidence.

In this section we:

- provide an overview of YTL Developments Limited;
- review the key elements of YTL's offer to develop, construct, fund and operate the Filton Arena;
- set that offer in the context of YTL's broader development plans in Filton, given that that drives the rationale for a commercial investment in an arena;
- outline what YTL requires of BCC and the other public sector funders in the West of England;
- review the commercial readiness of the scheme; and
- consider the key risks for BCC in light of the above.

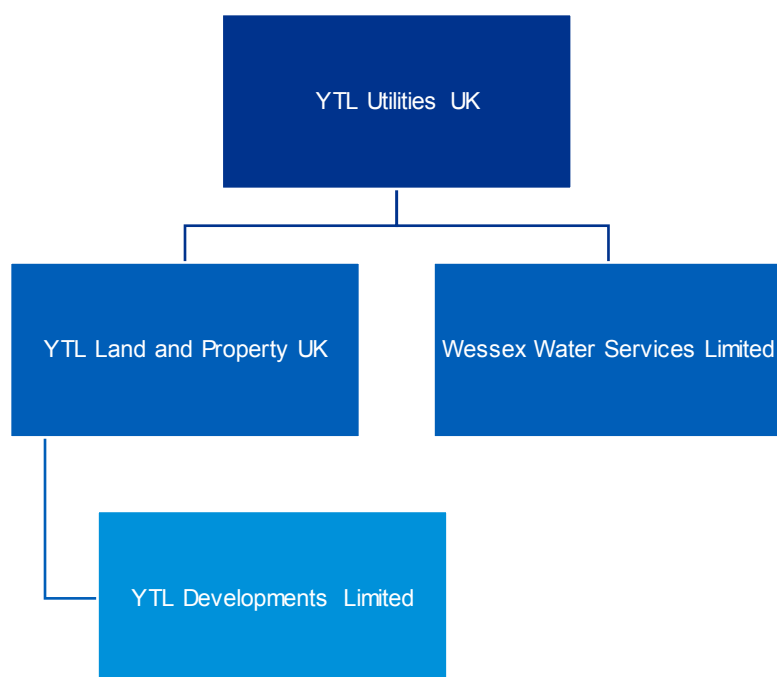
We understand that YTL is asking BCC for a six month exclusivity period to work up the detailed design. YTL has informed us that this will require BCC, at some point during or at the end of that period, to designate the Brabazon Hangar as the Arena location and withdraw support for the Temple Island Arena, driven by planning permission requirements. Prior to BCC withdrawing their support an agreement will have to be in place between BCC and YTL to ensure that the Filton Arena delivers the outcomes required by BCC. This would, in effect, end the prospect of the Temple Island Arena. At that point BCC's negotiating leverage with YTL would be diminished.

4.2 YTL Developments Limited

We understand that the Filton Arena would be developed, built, financed, maintained and operated by YTL Developments Ltd.

YTL Developments was setup in November 2016 as a subsidiary of YTL Land and Property UK. Its ultimate owner is Malaysia based parent company – YTL Corporation Berhad. YTL is an infrastructure and real estate conglomerate, owning UK assets such as Wessex Water Services Ltd, a large UK water utility business and The Gainsborough Hotel in Bath, as well as operating cement, construction and telecommunications businesses in Malaysia. Its operations have a global footprint, spanning from Australia to the United States of America.

Figure 6: Summary of UK legal ownership structure³²



Source: YTL company information

We summarise the key financials of YTL Corporation Berhad from its most recently audited accounts below in Figure 7.

Figure 7: YTL Financial Information³³

Financial Information	2017 Audit Accounts (Year ended June)	£m
Revenue		£2,629.2
Profit after Tax		£262.3
Cash on Balance Sheet		£2,423.6
Net Assets		£4,171.4

Source: YTL Corporate Berhad's Annual Report 2017

As far as we are aware, from a credit rating perspective, YTL is not covered by the 3 main credit rating agencies; Fitch, Standard & Poor's and Moody's. However, we note that a Malaysian based credit rating company, RAM Ratings who are part-owned by Fitch, issued a credit rating of AA1/ Stable in January 2018. This rating is an investment grade, and the second highest rating available, indicating a "high safety of timely payment and principal". YTL's UK team has outlined in discussions with KPMG that the Malaysian parent company is committed to funding the UK operations, including its developments at Filton and the Filton Arena, as part of its strategy of breaking into the UK market.

³² Note this is a highly summarised depiction of YTL's UK assets, showing the most relevant entities to the proposed project and is not a complete list of all YTL owned entities.

³³ Figures are converted from Malaysia Ringgit at a rate of 1MYR = £0.18, as at 12th April 2018 based on information in YTL Corporate Berhad's Annual Report 2017

We also note key financials of YTL's UK operations – YTL Utilities (UK) Limited – from its most recently audited accounts in Figure 8 below.

Figure 8: YTL Utilities (UK) Limited Financial Information

Financial Information	2017 Audited Accounts (Year ended June)
	£m
Revenue	571.5
Net Profit	139.3
Cash on Balance Sheet	97.8
Net Assets	556.0

Source: YTL Utilities (UK) Limited annual report 2017

Although detailed due diligence of YTL Utilities (UK) and its subsidiaries is beyond the scope of this report, we note that the company appears, as at the date of the accounts, well capitalised and the majority of its operations are in stable markets with limited competition, albeit the main subsidiary, Wessex Water Services Limited will be subject to the ongoing Ofwat pricing review into the water industry.

Nonetheless, as YTL diversifies its UK operations further into property development (see Section 4.4) it is likely to be subject to a greater degree of operating risk. We would recommend BCC undertake further due diligence to assess which of the YTL parent company entities will be providing funding and parent company support to the Arena during the development and operating phase.

4.3 Commercial proposition at the Filton Arena

YTL proposes to develop an arena at the Brabazon hangar, at Filton Airfield. We summarise the key commercial components of the project in Sections 4.3.1, 4.3.2 and 4.3.3 below.

4.3.1 Arena planning and development

YTL has conducted a high level development appraisal to assess the potential to transform the Brabazon Hangar into a 16,000 seated capacity arena with supporting food and beverage facilities.

To develop it we understand that planning permission would be required from BCC, and that South Gloucestershire Council (SGC) would also be involved in the process, for example with the traffic assessment. Subject to being granted the required six month exclusivity period, YTL plans to develop a detailed design over that time with a view to securing outline planning consent in the second half of 2019. YTL has indicated that it will be in a position to submit an outline planning application within the 6 month exclusivity period.

4.3.2 Arena construction

Subject to the relevant approvals, construction would commence in 2020 and YTL expect the Filton Arena to open in mid-2022. YTL will appoint a construction company to manage the build, and we understand that discussions are underway. KPMG has not been party to those discussions.

We understand the costs would be funded by YTL alone, although this is predicated on broader infrastructure works being completed. We explore the wider infrastructure development in Section 4.5.

YTL has indicated to us:

- That it expects the 16,000 seat arena development, including access, public realm and the associated food and beverage (F&B) facilities, to cost in the region of £100m.
- That this cost is based on “experience, evidence and market value of projects that have been completed in the last 5 years. YTL has factored in an additional 20% to deliver a world class facility”.
- That YTL is projecting a payback period of 15-20 years on its capital, excluding any land value uplift. We note that this is approximately half of the expected payback period of the proposed Temple Island Arena, suggesting a materially more profitable development. YTL assert that this is driven by the larger capacity of the Filton Arena.
- That through utilising the existing building shell of the hangar, YTL expects to be able to construct the Filton Arena for a lower cost than building from scratch at Temple Island. Furthermore, YTL notes that a significant proportion of construction risks relate to ground works, and that once the building has a shell, such as the proposed Arena at Filton, the risk of overruns becomes significantly reduced.

KPMG has not been provided with support for the £100m development cost, income or expenditure assumptions, nor for any of the assertions made by YTL above. YTL has provided the executive summary of a study by RLB undertaken to confirm the technical feasibility of the Arena seating bowl in the Central Bay of the Brabazon Hangar.

Assuming YTL funds all of the development costs, BCC would be not be exposed to any risk of this figure exceeding this quantum. However, should costs materially overrun against budget there is then potential for YTL to cease development. YTL has not provided as to the level of cost that they are willing to sustain before the Filton Arena becomes unviable to it. In our conversations with YTL, its management stated to KPMG that this risk is highly remote, as the development of the Filton Arena would have a catalytic effect on the speed of take up of their Filton Airfield development and the reputational damage done to it through such action would be significant.

4.3.3 Arena operations

YTL plans to operate the Filton Arena itself, and has outlined at a high level the events it would propose to run at the Arena. We are not aware that YTL has any prior experience in running an arena, albeit it has employed experienced personnel to do so, and whilst YTL would absorb the financial impact of the Filton Arena operations not meeting expectation, this may impact the broader economic and social benefits that BCC might expect to derive. YTL intends to develop a dedicated team to operate the Filton Arena with significant expertise from other large scale leisure venues.

Naming Rights revenue is a common source of income on other arenas in the UK, such as the Genting Arena in Birmingham. YTL has not made any final decisions as to its approach to this revenue stream but is considering using its own name to enhance the benefits to its own reputation.

YTL has provided little in the way of detailed financial information to KPMG to review the financial viability of the Filton Arena. Whilst the financial risk of this sits with YTL and not BCC, the risk to BCC is that following further proposal development YTL’s plans materially change or don’t proceed, undermining the strategic, social and economic rationale.

4.4 YTL Filton Airfield development

We understand that YTL is developing the area surrounding the site of the proposed Filton Arena in one of the UK’s largest development schemes, spread over an existing 350 acre site, with a gross development value of £1.5bn, according to YTL³⁴. The development will include 2,675 new homes, as

³⁴ KPMG has not been provided with any supporting information for this figure, which is based on conversations with YTL management.

well as commercial property development, three new schools and other community facilities. We understand it received outline planning permission in 2017 from South Gloucestershire council, having purchased the site from BAE Systems Plc.

YTL plan to develop 200 homes per year over the first years of the development, which will take place over 25 years. YTL intend to retain an interest in the site over that period, for example by retaining ownership of apartments it develops and act as a landlord. Through taking this long term approach, YTL argue it will drive a better development scheme and better align its incentives with those of the community.

This broader development, surrounding the Filton Arena sits at the heart of the YTL's rationale to develop an arena there. The Filton Arena and the supporting infrastructure could reasonably be expected to increase the land value of the site both through place-making and because of the local infrastructure improvements required from BCC or the LEP. Furthermore, having a 16,000 seat capacity arena at the heart of the development will, in YTL's view, give it national recognition, which, as it seeks to become a major force in UK property development, is of significant reputational benefit.

The majority of UK arena developments that we are aware of have required some form of public subsidy. The fact that the proposed Filton Arena does not require any direct subsidy is primarily due to the surrounding Filton Airfield project also being developed by YTL, and therefore this represents a unique opportunity for BCC. However, it is noted that the public sector is providing funding through the delivery of infrastructure improvements, some of which are being delivered as part of the wider CPNN development.

4.5 Supporting infrastructure

The broader public infrastructure requirements to support the 16,000 seat Filton Arena are an important component from YTL's perspective. The total cost of the proposed infrastructure to support the CPNN, North Bristol and an arena in Filton, per YTL, is set out in

Figure 9. Of this, £78m of funding has been secured for the Metrobus Extension and the rail extension to Bristol Temple Meads (MW2).

Figure 9: Summary of supporting infrastructure requirement

Item	Description	Cost	Current Funding Position	Further funding required from BCC/ Public Sector
Rail link to Bristol Parkway	A rail transport link from Bristol Parkway station to a new Filton station. This is at a very early stage, has not been agreed with Network Rail and requires discussions with Persimmon Group Plc regarding utilising land owned by them. The cost estimate is based on Mott McDonald's high level analysis for BCC of potential costs. This high-level study was for two in tracking but subsequent discussions indicate this may not be necessary, in which case BCC estimate the cost will be significantly lower.	£53.0m	No funding has been secured for this given the very early stages of development.	£53.0m
Metro West 2 – Rail link to Bristol Temple Meads	A rail transport link to central Bristol at Temple Meads station. This link has been agreed with Network Rail and is scheduled for completion in 2022	£43.0m ³⁵	Per discussions from BCC, we understand this is fully funded i.e. that the required funding has been identified to fund this infrastructure project from the following sources: — £36m City Deal EDF — £3m Local Growth Fund — £2m capital development funding from BCC and SGC — £2m developer funding (plus land)	£0
New station enhancement	Due to the Arena there will be increased numbers of passengers / fans wanting to use the station. YTL is in discussions with GWR and will provide these facilities on their Filton Airfield site.	£10.0m ³⁶	It has been agreed that YTL will fund the additional station upgrade work.	£0
Metrobus – Phase 2	Rapid transit bus service to central Bristol. We understand this will be operational in 2022.	£35.0m ³⁷	We understand that this is fully funded through the West of England EDF programme.	£0

We note that all of the schemes are in an early stage of development, and that as a result costs may rise or fall against the outline budgets as the schemes are progressed. In particular we note that the Bristol Parkway rail link is not part of the confirmed plans with Network Rail and the cost estimate is based on a high level desk top study and cost and dates will need to be developed during the next design stages. Should the infrastructure works exceed the agreed costs envelope/ estimates provided

³⁵ Figure per email from BCC Transport Planning team

³⁶ Figure per discussions with BCC

³⁷ Figure per email from South Gloucestershire County Council

above, there is a risk that BCC and the other funding partners may have to fund any shortfall. There is also a risk of delays in construction, which could impact on YTL's commercial position in relation to the Arena if not resolved prior to the opening of the Filton Arena.

It is not yet clear or decided which public sector body will meet these costs. We note that if the Temple Island Arena does not proceed, then £53.0m of the LEP funding will be saved and could be repurposed, subject to LEP approval and a revised business case. We have been informed by BCC that it will cap public sector liability for supporting infrastructure works at £53m, which has been discussed and agreed in principle with YTL. We recommend BCC formally agree the limit of any funding support required with YTL before giving formal approval to progress the scheme.

4.5.1 Other considerations

There are a number of additional considerations for BCC to consider in respect of the commercial proposals:

- Based on the assumption that any potential investment into the Arena would be on the same terms as YTL, it would seem reasonable to assume there are limited State Aid implications for BCC to consider. However we would recommend BCC commission further advice to confirm that position once the structure and terms of the investment have been agreed with YTL. Given the relative lack of detail on commercial proposals it is not possible to reach a definitive view at this stage. We note the potential £5m BCC equity investment in the Filton Arena is not material to YTL's decision making at this stage.
- It is essential to ensure that the transport related impacts of the Arena are fully assessed and an appropriate transport package is realised. To address this BCC, South Gloucestershire Council and YTL have agreed to work together to develop a package that is based on a number of options. These include MetroBus Extension, MW2 and enhanced, Park and Ride sites, the role of bus services, on and off street parking and the control and management of vehicle movements. BCC has informed us that its contribution toward supporting infrastructure works will be capped at £53m.

5 Economic assessment of the proposed Filton Arena

5.1 Overview of economic case analysis

As part of the scope of this Phase 2 report, we were asked by BCC to assess the strength of the economic case for the Filton Arena development proposal.

Our approach to assessing the potential economic impacts associated with the Filton Arena development has been conducted in accordance with the principles set out in the HM Treasury Green Book³⁸. Specifically, we assess the potential additional direct, indirect and induced economic impacts³⁹ of the proposed development in terms of GVA and employment:

- GVA is a core measure of the economic value of the goods and services produced at an individual project, company, industry or sector level, net of intermediate consumption (e.g. the goods and services that are used in the production process). It estimates the difference between the value of goods and services produced and the cost of inputs used to create those goods and services⁴⁰.
- Generating employment is a key channel through which a development, such as the Filton Arena, could contribute to the economy. We estimate employment in full-time equivalent (FTE) terms. This adjusts part-time or temporary staff into an annual full-time equivalent based on the proportion of full-time hours worked over a year.

Our analysis focuses on:

- the GVA and employment impacts associated with construction;
- the GVA and employment impacts generated through the operation of the Arena development, including the indirect and induced impacts associated with the supply chain and employees' spending of wages in the wider economy;
- the GVA and employment impacts associated with the additional spending of the attendees to Arena events; and
- any economic impacts associated with any wider development of the Filton site directly catalysed as a result of the Filton Arena development.

Our analysis of each of these individual areas are set out in Sections 5.2 and 5.3 below.

In line with the HM Treasury Green Book, we have assessed the additionality of the proposed development i.e. the economic activity that is additional to the local economy and would not arise in the absence of the project being brought forward. This includes an assessment of:

³⁸ HM Treasury (2018) The Green Book: Central Government Guidance on Appraisal and Evaluation.

³⁹ Direct economic impacts are the first round effect where the demand creates economic activity. Indirect impacts are the effects generated through the activity and output supported in the UK based supply chain as a result of procurement of inputs of goods and services (both for construction and ongoing operations). Induced impacts are multiplier effects that arise in the UK economy as a result of direct employees and employees in the UK supply chain spending a proportion of their wages in the UK. This spending generates additional economic activity for those businesses from which these employees buy goods and services and in these businesses' own wider supply chains.

⁴⁰ GVA is a key component of gross domestic product (GDP), which is a measure of the value of production and is a key indicator of the state of the economy. GVA is used in the estimation of GDP, by aggregating GVA across all industries and sectors in the economy and adjusting for taxes and subsidies at the whole economy level.

- Displacement: the extent to which the project could offset economic activity elsewhere.
- Leakage: the extent to which impacts are generated outside of the spatial area which it is intended to benefit. We have assessed the potential economic impact of the Filton Arena at three levels: the UK level, the West of England level and the Bristol level. When referring to impacts at the Bristol level, we have used the UK Government definition of a sub-region⁴¹, this is equivalent to the area of Bristol covered by BCC.

In addition to displacement and leakage, the HM Treasury Green Book recommends that an economic impact assessment consider the deadweight of a project. Deadweight refers to the outcomes which would have occurred without the project being brought forward. At present, it is unclear what the deadweight associated with the Filton Arena would be as YTL has, at present, no alternative plans for the Brabazon Hangar. We have therefore been unable to assess the deadweight of the project. Sections 5.2, 5.3.1 and 5.3.2 below provide more detail of our assessment of displacement and other additionality factors associated with the proposed Filton Arena.

The net economic impacts are presented in our analysis in NPV terms, applying a social time preference rate (STPR) discount rate of 3.5%, based on the HM Treasury Green Book guidance.

Our overarching methodology for the economic impact analysis for the Filton Arena is largely in line with the approach used to analyse the potential economic impacts of the Temple Island Arena, as presented in our Temple Island Arena: Value for Money Assessment report. However, it should be noted that due to the relatively early stage of development of plans for the Filton Arena, a comparable level of financial information was not available from YTL, specifically a projected Profit and Loss Statement for the operation of the proposed Arena was not available. Therefore, our analytical approach is based on YTL's anticipated direct employment figures and attendee numbers. As a result, the analysis is less robust and less detailed than the analysis that we were able to conduct for the proposed Temple Island Arena and the GVA estimates in particular, are based on a high level appraisal approach using average data for the relevant sectors, sourced from the ONS.

The analysis should be viewed as indicative only, and is predicated on the deliverability of the scheme and the achievement of YTL's projections in terms of employment and attendees.

When financial projections for the Filton Arena are developed by YTL, it will be important to conduct a more detailed assessment of the potential economic impacts. It is likely that the results of the analysis would change in line with adjustments to the data and assumptions underlying the calculations.

It should also be noted that our study does not include an assessment of the potential wider economic impacts associated with the transport infrastructure package that the Filton Arena would rely on. These projects will be subject to separate appraisals and their development is not subject to the Filton Arena development. These schemes are likely to deliver broader economic impacts that are not assessed within the scope of this study.

Our study also does not include an assessment of the potential social benefits that could be delivered if the Filton Arena proceeds. We note, however, that a number of the social impacts associated with delivering a new cultural asset (an arena), as detailed in our Temple Island Arena: Value for Money Assessment report, would apply to the Filton Arena. Our assessment of the extent to which the Filton Arena would meet the objectives set by BCC for the Temple Island Arena, set out in Section 3, also covers a number of social objectives.

⁴¹ A sub-region is defined as any spatial area that covers the very local (e.g. 5 miles) through to the local authority district.

5.2 Economic impacts associated with the construction of the proposed Filton Arena

5.2.1 Potential GVA impacts associated with the construction of the proposed Filton Arena

In order to develop the Filton Arena within the Central Bay of the Brabazon Hangar, YTL has told KPMG that it expects to complete a programme of construction works which will include:

- the conversion of the Central Bay hangar into an arena;
- the provision of the required F&B needed to service a 16,000 seat arena;
- the construction of a public pedestrian access footbridge and associated public realm works; and
- the construction of the North Filton station, including the enhanced works.

YTL has indicated to KPMG that its estimated total cost of construction for these development proposals is approximately £100m.

It is anticipated by YTL that the design, planning and construction of the Filton Arena could be undertaken over the course of 3.5 years with completion and opening in Spring/ Summer 2022, with a series of “ramp up events”.

Notwithstanding our comments in Section 4 on the financial and commercial risks associated with the delivery of the Filton Arena, we have used YTL’s estimates to assess the potential economic impacts associated with the construction of the proposed Filton Arena.

The construction of the Arena within the Brabazon Hangar will directly generate economic activity. It will also generate indirect economic impacts through the supply chain, e.g. through the purchase of construction materials, as well as induced impacts associated with employees’ spending wages in the wider economy. However, this impact will be generated for a limited time only – over the construction period.

In order to estimate the economic impact associated with the construction phase of the Filton Arena development, we have applied the ratio of GVA to output for the construction sector to the YTL estimated total construction cost, resulting in an estimate of the direct GVA that may be generated by the Filton Arena development construction.

The indirect and induced construction GVA has been estimated by applying the relevant economic multipliers for the construction industry⁴².

On this basis, we estimate that the design and construction of the Filton Arena over the 3.5 year design and construction period, could generate:

- gross direct GVA of approximately £40.7m;
- gross indirect GVA of approximately £37.2m; and
- gross induced GVA of approximately £13.9m.

Therefore, the total gross GVA generated through the construction of the Filton Arena development, is estimated to be £91.8m over the 3.5 year design and construction period.

⁴² Based on Standard Industry Classification (SIC) code of 41, we have applied an ONS indirect multiplier of 1.89 and Scottish Government type I and type II multipliers of 1.60 and 1.86 respectively.

These economic impacts have also been assessed in net terms, accounting for additionality.

We have set out our assessment of the estimated level of additionality associated with the construction in Figure 10 below.

Figure 10: Assessment of the additionality of construction impacts

Additionality factor	Estimated level	KPMG assessment
Deadweight	-	<p>YTL has indicated that if the Arena is not brought forward within the Brabazon Hangar, the Hangar will continue in its present use. Currently, the East Bay of the Brabazon Hangar is being rented for small scale manufacturing use, whilst the West Bay of the Hangar is used as storage and warehousing by YTL. The Central Bay is not presently being used.</p> <p>YTL has indicated that development investment would be required to support an alternative use, particularly as the Energy Performance Certificate (EPC) rating of the building is low at present. YTL has indicated that this would need to be addressed to make the Hangar lettable. No plans for such investment have been made and YTL has indicated that it is not developing any alternative plans for the Hangars while the opportunity to develop an arena remains. Therefore, in the short to medium term it is unlikely that an alternative use of the Hangar requiring construction/ development investment would be brought forward. As a result, the construction of the Arena scheme at Filton is likely to have limited deadweight in the near future.</p> <p>However, with YTL's wider developments in the Filton area we consider it unlikely that the site would remain undeveloped indefinitely and an alternative development may be brought forward at some point over the 25 year appraisal period, despite no plans presently being in place. With no alternative plans in place, however, it is not possible to assess the potential alternative construction costs and associated economic activity. Further information would be required.</p>
Displacement	10%	<p>The construction activity is expected to take place over a relatively long time period and as a result, we consider that there will be relatively low levels of displacement from other major construction projects across the West of England and UK. Therefore, in line with our analysis of the displacement associated with the Arena on the Temple Island site, we assume a low level of displacement in our analysis of 10%.</p>
Leakage	17.5% at a West of England level 25% at a Bristol level	<p>As the Brabazon Hangar is located in Bristol, construction of the Arena will be undertaken in Bristol and as a result, we would expect that the direct impacts of construction to be retained in Bristol and the West of England.</p> <p>Through the supply chain, however, there will be a level of leakage. It is unlikely that all of the building materials and other resources required in the construction of the Filton Arena will be sourced from the West of England.</p> <p>Taking the factors that will affect the likely leakage of both direct and indirect impacts of construction into account, at the regional level we assumed a leakage rate for the construction impacts of 17.5% for indirect and induced impacts. A higher rate of leakage could be expected for Bristol, we have therefore assumed a medium leakage</p>

level of 25% for Bristol. Our assumptions are based on the levels detailed in the HCA Additionality Guide⁴³.

Source: KPMG analysis

We have applied the additionality assumptions as set out in Figure 10 to estimate the net GVA impacts associated with the construction of the Arena. It should be noted our estimates of net impacts are based on current information, and assumptions of additionality levels produced by the HCA. As plans progress, and more detailed information and evidence becomes available, it would be possible to more accurately estimate the net impacts associated with the construction of the Filton Arena. Therefore, we may have over- or under-estimated the potential economic impacts associated with the construction of the Filton Arena.

We estimate that the construction of the Arena could generate approximately £82.6m in terms of net total GVA, approximately £66.6m of which will be generated within the West of England. Figure 11 below presents the breakdown of gross and net GVA by the direct, indirect and induced impacts.

Figure 11: Gross and net GVA associated with the construction of the Filton Arena

	Direct GVA	Indirect GVA	Induced GVA	Total GVA
Gross GVA	£40.7m	£37.2m	£13.9m	£91.8m
Net GVA	£36.6m	£33.5m	£12.5m	£82.6m
<i>Of which is in the West of England (including Bristol)</i>	<i>£29.5m</i>	<i>£27.0m</i>	<i>£10.1m</i>	<i>£66.6m</i>
<i>Of which is in Bristol</i>	<i>£26.4m</i>	<i>£24.2m</i>	<i>£9.1m</i>	<i>£59.7m</i>

Source: KPMG analysis

5.2.2 Potential employment impacts associated with the construction of the proposed Filton Arena

In addition to GVA, the construction of the Filton Arena will also generate employment for the duration of the construction period.

The direct employment impact is estimated based on the construction costs and estimated GVA associated with this. By dividing the estimated annual direct construction GVA by the average annual GVA per FTE for the construction sector⁴⁴, we estimate that the direct employment associated with the construction of the Arena is 531 gross FTE jobs for the construction period. Assuming that one permanent FTE job is over a 10 year period, the gross jobs associated with the construction of the Filton Arena would be equivalent to 53 permanent FTEs.

Through supply chain spending and wage spending of employees, we estimate that a further 47 indirect and 14 induced FTE jobs, in gross terms, could be generated through the construction of the Arena.

Applying the estimated additionality levels set out in Figure 10 above, we estimate that overall 103 net FTE jobs could be generated through the construction of the Filton Arena. Of these jobs, we estimate that 83 could be generated in the West of England.

⁴³ HCA (2014) Additionality Guide, 4th Edition

⁴⁴ Based on SIC code 41: Construction of buildings.

Figure 12: Gross and net employment impacts associated with the construction of the Filton Arena

	Direct	Indirect	Induced	Total
Gross FTEs	53	47	14	114
Net FTEs	48	42	13	103
<i>Of which is in the West of England (including Bristol)</i>	38	34	10	83
<i>Of which is in Bristol</i>	34	31	9	74

Source: KPMG analysis

5.3 Economic impacts generated through the operation of the proposed Filton Arena

The operation of the Filton Arena will generate ongoing economic impacts directly through the hosting of events, indirectly through spending with suppliers and induced impacts through employees' spending of wages within the local economy.

Furthermore, additional economic impacts will be generated through event attendee spending in the local economy. YTL has provided KPMG with the expected number of attendees and events per annum, set out in Figure 13 below.

Figure 13: Number of Arena events and attendees per annum

	Year 1	Year 2	Year 3	Year 4	Year 5 and onwards
Number of events	75	90	110	120	140
Number of attendees	600,000	775,000	950,000	1,125,000	1,300,000

Source: YTL

We note that YTL has indicated to KPMG that its estimates of attendee numbers are based on a "detailed benchmarking [that] has been completed against all UK arenas above 13,000 capacity (Leeds, Manchester, Birmingham, Wembley & The O2)".

YTL has provided KPMG with estimated annual attendee numbers for a number of the UK's arenas, based on information it obtained as part of its benchmarking. This is shown in Figure 14 below, with arena capacity figures.

Figure 14: UK arena attendees per annum

Arena	Location	Arena capacity	Estimated attendees (per annum)
O2 Arena	London	21,000	2,700,000 ⁴⁵
SSE Hydro	Glasgow	20,000	1,028,934 ⁴⁶
Genting Arena Birmingham	Birmingham	15,800	1,216,000 ⁴⁷
Manchester Arena	Manchester	15,683	1,501,500 ⁴⁸
First Direct Arena	Leeds	13,000	1,080,000 ⁴⁹
ECHO Arena	Liverpool	11,000	660,000 ⁵⁰
Motorpoint Arena Cardiff	Cardiff	5,000	450,000 ⁵¹

Source: See footnotes below

⁴⁵ <https://www.standard.co.uk/business/americans-aeg-and-the-chancellor-philip-hammond-rake-it-in-from-o2-arena-a3785986.html>

⁴⁶ https://www.revoly.com/main/index.php?s=SSE+Hydro&item_type=topic

⁴⁷ These attendance figures have been provided to us by YTL based upon consultation with the arena operator.

⁴⁸ These attendance figures have been provided to us by YTL based upon consultation with the arena operator.

⁴⁹ These attendance figures have been provided to us by YTL based upon consultation with the arena operator.

⁵⁰ <http://www.echoarena.com/about-us/who-we-are/facts-and-figures/>

⁵¹ Cardiff Metropolitan University and Mandix (2015) Motorpoint Arena Cardiff: An Economic Assessment.

We have not verified the robustness of YTL's attendee numbers. However, we note that based on the data provided the attendee numbers estimated by YTL suggest that the Filton Arena would be the third largest arena in the UK, in terms of both capacity and number of attendees when fully operational after year 5.

5.3.1 Economic impacts associated with the operation of the proposed Filton Arena

Gross employment impacts

YTL has indicated that it expects that the Arena will directly employ 60 to 80 FTEs. KPMG was told by YTL that this estimate was developed "based on evidence from other arenas as well as through experience with the operation of other arenas". It should be noted, however, that KPMG has not been presented with this evidence from YTL and has not assessed the validity of these assumptions. We note, however, that this is a higher level of direct employment than planned for the proposed Temple Island Arena (37 FTEs), although this may be linked to the differences in arena capacity and the programme of events.

In addition to these 60 and 80 direct employees, YTL has indicated that part-time casual labour will be hired on event days to undertake roles such as stewarding and food and beverage serving. YTL estimates that 400 to 450 workers would be hired on event days and would generally be employed for 6-8 hour shifts (i.e. a full working day).

We have converted this casual employment into annual FTE terms based on the YTL forecast number of events at the Filton Arena per annum. We estimate that the additional employment associated with the operation of the Arena will range between 82 and 173 annual FTEs.

Therefore, overall, the direct employment associated with the operation of the Filton Arena could range between 142 and 253 in gross FTE terms.

We have estimated the indirect and induced employment that would be generated through the operation of the Filton Arena by applying the relevant employment multipliers to the direct YTL employment. Using this approach, we estimate that the indirect employment could range between 46 and 80 gross FTE jobs and the induced employment impact could range between 12 and 17 gross FTE jobs.

Figure 15 below presents the estimated total gross direct, indirect and induced employment associated with the operation of the Arena over time.

Figure 15: Employment in gross FTE terms associated with the operation of the Arena over time

	Year 1	Year 2	Year 3	Year 4	Year 5 and onwards
Direct employment	142 – 172	159 – 191	181 – 216	192 – 228	213 – 253
Indirect employment	46 – 56	51 – 62	58 – 69	61 – 73	68 – 80
Induced employment	12 – 15	13 – 16	13 – 16	14 – 17	14 – 17
Total employment	201 – 244	222 – 268	252 – 301	266 – 318	295 – 350

Source: KPMG analysis

Gross GVA impacts

At present, there is no forecast financial information for the operation of the Filton Arena. Therefore, we have only been able to conduct a high level appraisal of the potential GVA impacts based on the level of direct employment that YTL has indicated that the Filton Arena would support.

Using the direct employment estimates we have applied the ONS average GVA per FTE for the relevant sectors⁵² to estimate the direct GVA associated with the operation of the Arena. We estimate that between £6.7m and £11.0m of gross direct GVA could be generated per annum through the operation of the Filton Arena.

Further GVA will be generated indirectly through supply chain expenditure related to the operation of the Arena. We have estimated indirect GVA by applying the relevant UK Type I multipliers⁵³ to the estimated direct GVA associated with YTL's estimated direct employment.

Based on the level of indirect employment, we estimate that between £3.6m and £5.5m per annum could be generated in indirect GVA through the operation of the Arena.

In addition, induced GVA will be generated through the direct and indirect employees' wage spending in the economy. We have estimated induced GVA by applying the relevant Type II multipliers⁵⁴ to the estimated direct GVA associated with YTL's direct employment. We estimate that £2.2m to £3.0m in gross induced GVA per annum could be generated as a result of the operation of the Arena.

Figure 16: Gross GVA per annum associated with the development of the Filton Arena

	Year 1	Year 2	Year 3	Year 4	Year 5 and onwards
Direct GVA	£6.7m - £8.4m	£7.3m - £9.0m	£8.0m - £9.8m	£8.4m - £10.2m	£9.1m - £11.0m
Indirect GVA	£3.6m - £4.4m	£3.9m - £4.7m	£4.3m - £5.0m	£4.4m - £5.2m	£4.8m - £5.5m
Induced GVA	£2.2m - £2.3m	£2.4m - £2.5m	£2.6m - £2.7m	£2.7m - £2.8m	£2.9m - £3.0m
Total GVA	£12.6m - £15.1m	£13.5m - £16.1m	£14.8m - £17.5m	£15.5m - £18.1m	£16.7m - £19.5m

Source: KPMG analysis

Net employment and GVA impacts

The analysis detailed above presents the economic impacts in gross terms. In line with HM Treasury's Green Book, it is important to assess the additionality of the project.

We have assessed the additionality of the economic impacts associated with the operation of the Filton Arena to estimate the level of ongoing net employment and GVA. Figure 17 below sets out our assessment of the additionality factors to apply in our analysis.

Figure 17: Assessment of the additionality of the operation of the Filton Arena

Additionality factor	Estimated level	KPMG assessment
Deadweight	-	<p>To assess the potential deadweight associated with the development of the Filton Arena, we have considered the alternative use for the hangar if it were not converted into an arena.</p> <p>As detailed in Figure 10, YTL has indicated that if the Arena is not brought forward within the Brabazon Hangar, the Hangar will be continue to be used as it is presently. While the East and West Bay hangars are in use, we note that the Central Bay hangar is currently not in use.</p> <p>YTL has indicated that it is not developing any alternative plans for the Central Bay hangar while the opportunity to develop an arena remains. However, with its wider developments in the Filton area we consider it unlikely that the site would remain undeveloped</p>

⁵² Based on type of role undertaken by the employees, as provided by YTL.

⁵³ Multipliers have been based on the relevant SIC code for each job type, e.g. for those staff employed for food and beverage serving we have used SIC code 56: Food and beverage service activities. For the 60-80 full-time staff YTL intends to hire, we have applied multipliers relevant for SIC code 90: Creative, arts and entertainment activities.

⁵⁴ See footnote above. Multipliers have been selected based on the relevant industry for an employees' job function.

indefinitely and an alternative development may be brought forward at some point over the 25 year appraisal period.

However, as there are no alternative plans at present, we have been unable to assess the level of deadweight associated with the Filton Arena project. We consider that the operation of the proposed Filton Arena is likely to have limited deadweight in the near future given the lack of plans but there would likely to be some degree of deadweight over the medium to long term.

Displacement	5% for direct impacts	<p>The ERS study, previously undertaken in relation to the proposed Arena on the Temple Island site, suggests that other venues in Bristol did not anticipate significant competition from an arena in terms of booking acts and displacing attendees. The study suggests that an arena in Bristol would compete with other large arena venues across the UK and the catchment area for audiences would extend across the South West and West of England. We consider that this would likely also apply for an arena located at Filton. Therefore, in our analysis we assume that there would be a very low level of displacement associated with the direct operation of the Filton Arena. We have assumed a 5% level of displacement for direct impacts.</p> <p>For the indirect and induced impacts we have assumed a low to medium level of displacement, set at 20%. This is based on our views of the potential geographic distribution of attendees, as well as evidence gathered from similar developments and events⁵⁵. This is also in line with our assessment of the Arena on Temple Island.</p>
	20% for indirect and induced impacts	
Leakage	17.5% for indirect impacts at a West of England level	<p>Brabazon Hangar is located within Bristol, therefore, all the direct economic activity that takes place there through the ongoing operations of the development will be generated in Bristol.</p> <p>However, it can be expected that there will be leakage of the indirect and induced economic impacts into the wider UK economy as the supply chain for the facilities and the spending of direct and indirect employees is likely to extend beyond Bristol and the West of England. The Brabazon Hangar is located on the edge of Bristol and South Gloucestershire and therefore, a higher level of leakage outside of Bristol into South Gloucestershire could be expected from the Filton Arena. This is evidenced in travel to work patterns⁵⁶, which suggest that for the City of Bristol, the highest inflow of employees are from South Gloucestershire. Between the City of Bristol and South Gloucestershire there is a positive net flow of people into the City of Bristol, showing that the number of people commuting for work into the City of Bristol from South Gloucestershire is higher than the outflow from Bristol to South Gloucestershire.</p> <p>In terms of the supply chain impacts, YTL has stated to KPMG that it intends to put in place a local food and beverage sourcing policy once the Arena is operational. However, the details of this sourcing policy have not been confirmed yet and there are no firm commitments in place to guarantee this. It is also unlikely that the procurement of other supplies, as well as the procurement through the wider supply chain, would be based on adopting a similar local sourcing policy.</p>
	25% for indirect impacts at a Bristol level	

⁵⁵ In KPMG (2017) Colston Hall economic impact assessment and KPMG (2016) Great Britain: Flying High. Economic impact study of Land Rover BAR and the Louis Vuitton America's Cup World Series Portsmouth 2016, the reported levels of displacement for off-site visitor spending were 16% and 11% respectively.

⁵⁶ Nomis (2011) Location of usual residence and place of work by method of travel to work, based on ONS 2011 Census data.

We have used information from the HCA Additionality Guide⁵⁷ to estimate the overall level of leakage. At the regional level, we consider that a low to medium level of leakage would be appropriate to apply. This equates to leakage levels of 10% to 25%. For the purposes of analysis, we apply the midpoint of 17.5% at a West of England level. At a Bristol level, we would expect a higher level of leakage and have therefore assumed a medium level of leakage. We have therefore applied a leakage level of 25% at a Bristol level. The level of leakages outside of the UK economy is factored into our gross economic impact assessment as the economic multipliers used take account of imports to the UK.

Source: KPMG analysis

Applying the additionality factors set out in Figure 17 above, we have estimated that the net GVA and employment impacts associated with the proposed operation of the Filton Arena. Our estimates of net impacts are based on current information, and assumptions of additionality levels produced by the HCA. As plans progress, and more detailed information and evidence becomes available, it would be possible to more accurately estimate the net impacts associated with the operation of the Filton Arena. Therefore, we may have over- or under-estimated the potential economic impacts associated with the operation of the Filton Arena.

Figure 18 below sets out the results of our analysis of the estimated net economic impacts in NPV terms on both a per annum basis and over the 25 year appraisal period.

Figure 18: Net GVA (in NPV terms) and employment (in FTE terms) per annum and over 25 years associated with the Filton Arena

	Net employment per annum (in FTEs)	Net GVA per annum (in NPV terms)	Net GVA over 25 years (in NPV terms)
West of England	172 - 301	£5.1m - £10.7m	£192.1m - £202.9m
Bristol	167 - 294	£4.9m - £10.2m	£183.9m - £193.7m

Source: KPMG analysis

5.3.2 Economic impacts from attendee spending in the wider economy

The Filton Arena would also generate economic impact by attracting event attendees to Bristol. Linked to their visit to the Arena, these attendees will potentially spend in the local economy, for example purchasing goods and services, such as food and beverages, public transport and accommodation.

We have estimated the level of this potential attendee spending, and consequential GVA and employment impacts, using the following information:

- YTL's estimates of the number of attendees at the Filton Arena (see Figure 13);
- an estimate of the proportion of attendees that will be day visitors and overnight visitors. This is based on data on tourism trips to Bristol provided by Destination Bristol and VisitBritain^{58,59};
- estimates of average attendee spending, by type of spending (e.g. food and drink, retail, transport, accommodation) for day and overnight visitors for Bristol and South Gloucestershire. This is based on information provided to us by Destination Bristol;
- conversion of estimated attendee spending to direct GVA, based on the relevant sector level output to GVA ratio for different categories of attendee spending, sourced from the ONS;

⁵⁷ HCA (2014) Additionality Guide. 4th Edition.

⁵⁸ The figure used is for all domestic tourism trips to Bristol and is not specific for trips where the intended purpose is to attend a live event or conference/ exhibition. As a result, it is possible that the proportion of day to overnight trips is either over- or under-estimated, dependent on the relative catchment areas of all visitors to Bristol, compared to the catchment area for arena attendees.

⁵⁹ VisitBritain (2016) The GB Tourist: Statistics 2015.

- estimates of indirect and induced GVA estimated by applying the relevant ONS sector level economic multipliers to the direct GVA associated with each category of attendee spending; and
- estimates of employment impacts based on the estimated GVA impacts and the average GVA per FTE for each relevant sector.

Figure 19 below sets out our estimates of gross economic impacts per annum that could be generated through the spending of Filton Arena attendees.

It should be noted, however, that the estimated economic impacts are based on YTL's forecasts for attendee numbers. As we noted in Section 5.3, YTL's forecast arenas attendee number would make the Filton Arena the third largest arena in the UK. In addition, it should be noted that the attendee numbers for the Filton Arena are more than double those forecast for the Arena on Temple Island. If the forecast level of attendees is not achieved by the Filton Arena, the economic impacts from wider attendee spending, both in terms of GVA and employment, would be lower.

Figure 19: Gross GVA and employment (in FTEs) per annum associated with Filton Arena attendee spending

		Year 1	Year 2	Year 3	Year 4	Year 5 and onwards
GVA	Direct	£15.5m - £17.7m	£20.1m - £22.8m	£24.6m - £28.0m	£29.1m - £33.1m	£33.7m - £38.3m
	Indirect	£9.8m - £11.1m	£12.7m - £14.4m	£15.5m - £17.6m	£18.4m - £20.9m	£21.3m - £24.1m
	Induced	£4.3m - £4.9m	£5.6m - £6.3m	£6.8m - £7.8m	£8.1m - £9.2m	£9.4m - £10.6m
	Total	£29.7m - £33.7m	£38.3m - £43.6m	£47.0m - £53.4m	£55.7m - £63.2m	£64.3m - £73.1m
	Direct	491 - 560	634 - 723	777 - 886	920 - 1,049	1,063 - 1,213
	Indirect	167 - 190	216 - 245	264 - 300	313 - 355	362 - 411
Employment (FTEs)	Induced	62 - 71	81 - 92	99 - 112	117 - 133	135 - 154
	Total	720 - 820	930 - 1,059	1,140 - 1,298	1,350 - 1,538	1,560 - 1,777

Source: KPMG analysis

As with the analysis of the proposed Temple Island Arena, we note that this additional spending of attendees, and resultant economic activity, may be generated with established businesses in Bristol (or in a wider local area) or with new businesses established to cater for the increased demand. Given the lack of information available at this stage, it is not possible to distinguish between this. However, as part of our assessment of the additionality of the economic impacts from attendee spending, we have considered the potential leakage and displacement of economic activity in Bristol and the wider West of England region.

Figure 20 below sets out our assessment of the estimated additionality of the economic impacts arising from attendee spending.

Figure 20: Assessment of the additionality of Arena attendee impacts

Additionality factor	Estimated level	KPMG assessment
Deadweight	-	The deadweight associated with the operation of the Arena and attendee spending will depend on any alternative use for the site. As explained above, with YTL's wider developments in the Filton area we consider it unlikely that the site would remain undeveloped indefinitely and an alternative development may be brought forward at some point over the 25 year appraisal period, despite no plans presently being in place. If an alternative use is also some form of visitor attraction that would bring additional attendees to the local area, it is likely that there could also be some degree of deadweight associated with the impacts of Arena attendee spending.

However, it is not clear if any alternative development would be associated with bringing additional attendees to the area (the current use of the Brabazon Hangar does not involve this). Therefore, it is not possible to determine the degree of deadweight associated with the attendee spending at this stage. We consider it would be limited, at least in the short to medium term, given the lack of plans for the hangars.

Displacement	20%	<p>The displacement associated with attendee spending is the level of spending that Arena attendees would have incurred irrespective of whether they attended an event at the Arena or not.</p> <p>As explained above, the ERS study suggests that other venues in Bristol did not anticipate significant competition from an arena in Bristol in terms of pulling away audiences. It is expected that audiences would be drawn from a wider catchment area around Bristol and that an arena in Bristol would generally compete with other large UK arenas, particularly those closest to Bristol i.e. Cardiff, London and Birmingham. Stakeholders that KPMG engaged with⁶⁰ as part of our VfM review of the proposed Temple Island Arena also indicated that it could be expected that an arena in Bristol would draw audiences from the South West of England, for example Devon and Cornwall, unlocking a market that currently does not have close or easy access to a large arena.</p> <p>There will be some level of displacement associated with attendee spending. Attendees will have limited disposable income to spend, meaning that any expenditure associated with attending an event at the Filton Arena will displace expenditure for alternative reasons. This may be spending on similar activities, such as food and beverages, and/or leisure activities.</p> <p>Taking into consideration these factors, we consider that it would be reasonable to assume a 20% level of displacement of Arena attendee spending at both the West of England and Bristol level.</p>
Leakage	<p>17.5% at West of England level</p> <p>25% at Bristol level</p>	<p>The level of leakage is associated with both where the spending of Arena attendees takes place, as well as the location of the wider supply chains that service that spending (e.g. the source of the food and beverage products as well as their input ingredients).</p> <p>We consider that when attending an event at the Filton Arena, attendee spending is likely to be focused in the West of England, primarily within Bristol and South Gloucestershire. However, the supply chains to service this spending are likely to span more widely across the region and UK. Given this, overall, we consider that it would be reasonable to assume a low to medium level of leakage out of the West of England. Therefore, in our analysis we have assumed a 17.5% level of leakage at the West of England regional level, based on the midpoint of the low and medium levels of regional leakage identified in the English Partnerships Additionality Guide⁶¹.</p> <p>We have also considered leakage at the Bristol level.</p> <p>We consider that Arena attendee spending (and the direct economic activity associated with this) may be concentrated more closely around the Filton site than may be the case if the Arena were located in the City Centre. Based on the proposed infrastructure development plans, the Filton Arena would be connected to both</p>

⁶⁰ Stakeholders include SMG and Live Nation (the operators of the Temple Island Arena), BCC and Destination Bristol.

⁶¹ English Partnerships (2008) Additionality Guide: Third Edition.

Bristol Parkway and Bristol Temple Meads station. Additionally, as part of the CPNN there are plans to expand The Mall at Cribbs Causeway, which borders the Filton site. It is likely that this expansion will strengthen the retail and food and beverage offerings surrounding the Filton site. With 39% and 33% of the average spend of a day visitor in Bristol consisting of shopping and food and drink respectively⁶², these two spending areas collectively make up more than two-thirds of the total average expenditure for a day visitor in Bristol.

Also, we understand from YTL that it plans to include over 5,000m² of food and beverage retail space in the Filton Arena, providing multiple service outlets. Given the range of options available to attendees, day visitors to the Arena in particular may concentrate their spending in the Arena itself and in the local area prior to, and after, the event, rather than travelling to Bristol City Centre. We note that the Filton Arena will be located on the border of Bristol and South Gloucestershire and that the majority of the retail and leisure development on the wider Filton site will be located in South Gloucestershire.

The connectivity of the Filton site to the wider area, as well as the strong retail and food and beverage offerings on, or in close proximity of, the Filton Arena will likely mean that a proportion of the attendees may not travel through Bristol City Centre when attending an event at the Filton Arena. Thus, we would expect a higher level of leakage out of Bristol into South Gloucestershire associated with the Filton Arena, when compared to the proposed Temple Island Arena.

Some of this leakage of impact may be mitigated to an extent as YTL intends to partner with Destination Bristol and Bristol wide hotels, restaurants and tourist partners to offer event packages to attendees. These plans are still in the early stages of development so there is no detailed information available on the exact packages would be offered or expected levels of take-up. However, these packages could encourage attendee spending in Bristol.

Given the factors detailed above, and to reflect our view that there would be a higher level of leakage at the local level than the regional level, for the purposes of our analysis we have assumed a medium level of leakage of 25% at a Bristol level, based on guidance produced by the HCA⁶³.

Source: KPMG analysis

Applying the additionality factors set out in Figure 19 above, we have estimated the net GVA and employment impacts associated with the attendee spending in the wider economy linked to the Filton Arena. It should be noted our estimates of net impacts associated with attendee spending are based on current information, and assumptions of additionality levels. As plans progress, and more detailed information and evidence becomes available, it would be possible to more accurately estimate the net impacts associated with the attendee spending. Therefore, we may have over- or under-estimated the potential economic impacts associated with attendee spending.

Figure 21 below sets out the results of our analysis in NPV terms on a per annum basis and over the 25 year appraisal period.

⁶² Based on Destination Bristol and Visit England data on the average spending for a domestic day visitor to Bristol.

⁶³ HCA (2014) Additionality Guide, Fourth Edition 2014.

Figure 21: GVA and employment impacts associated with Arena attendee spending

	Year 1	Year 2	Year 3	Year 4	Year 5 and onwards	25 years
Total visitors	600,000	775,000	950,000	1,125,000	1,300,000	30,750,000
Estimated visitor spending	£31.3m - £35.6m	£40.5m - £46.0m	£49.6m - £56.3m	£58.8m - £66.7m	£67.9m - £77.1m	£1,605.9m - £1,823.7m
Net GVA (in NPV terms):						
<i>In the West of England</i>	£16.2m - £18.4m	£20.2m - £22.9m	£23.9m - £27.1m	£27.3m - £31.1m	£15.3m - £34.7m	£551.9m - £627.0m
<i>In Bristol</i>	£14.2m - £16.2m	£17.8m - £20.2m	£21.0m - £23.9m	£24.1m - £27.3m	£7.4m - £30.5m	£485.7m - £551.8m
Net employment (FTEs):						
<i>In the West of England</i>	450 - 513	581 - 662	712 - 812	844 - 961	975 - 1,111	975 - 1,111
<i>In Bristol</i>	396 - 451	511 - 583	627 - 714	742 - 846	858 - 977	858 - 977

Source: KPMG analysis

Over a 25 year period, we estimate that net GVA in NPV terms could equal up to £627.0m in the West of England. Of this, we estimate that up to £551.8m could be generated within Bristol over a 25 period.

5.3.3 Wider catalysed impacts

We consulted with BCC and YTL to understand what, if any, wider impacts might be catalysed through the development of the Filton Arena, beyond those already taken in to account through attendee spending.

YTL has considered that the main catalytic impacts of the Filton Arena would be in terms of driving the development rate, and raising the profile of, its existing development plans for the wider Filton area as well as bringing forward the development of the East and West Bays of the Brabazon Hangar.

YTL is planning to create a new city district in Filton, which will involve the development of a large site including provision of⁶⁴.

- 2,675 new homes;
- 26 hectares of employment space;
- a retail centre;
- public services, such as three new schools; and
- community facilities and recreational spaces.

YTL has stated to KPMG that the Filton Arena development could have a catalytic impact on the wider site – bringing the development forward more quickly by raising the profile of the Filton site across the West of England region, as well as nationally. It considers that the Filton Arena project would effectively “kick-start” the wider development and could drive a higher development rate, particularly for the residential developments.

However, YTL has not undertaken any modelling to understand the scale and scope of these catalytic impacts and the likely differences in the development rates if the Filton Arena were to proceed compared to if it were not to. Therefore, there is a lack of evidence available for KPMG to quantify the potential catalytic impacts. However, we consider it reasonable to assume that there would potentially be a positive impact on the wider site from the development of the Arena at Filton, given the profile that the Arena would likely have, the additional visitors it would attract to the area and the role it would play in the regeneration of the site. An assessment of what, if any, impact any higher rate of residential

⁶⁴ <http://www.ytlproperty.co.uk/>

development on the Filton site could have on the wider residential market in Bristol and the West of England should be considered, but is not possible to assess at this stage.

In addition to the development of the wider site, YTL has indicated that the development of the Filton Arena in the Central Bay of the Brabazon Hangar would likely catalyse the development of the East and West Bays of the Brabazon Hangar. Although firm plans have not been developed at this stage, YTL has indicated to KPMG that the East Bay could be developed for exhibition space, whilst the West Bay could become a family leisure development.

The timing of any development of the East and West Bay hangars is also unclear. Although at the outset of our study YTL suggested to KPMG that they may potentially be developed to the same timescales as the Filton Arena, it is now YTL's view that the development would not take place until at least 5 years post-completion of the Filton Arena.

Given a lack of certainty around the timing of redevelopment and the potential use, we have not estimated the economic impacts that would be associated with the East and West Bay hangars. However, we note that if the Filton Arena were to catalyse their development, it would add to the overall economic case for the Arena.

5.3.4 Business rates

Additional to the economic benefits that could be associated through the construction and operation of the Filton Arena, the Arena would also generate business rate income. It is currently expected that half of the business rates income would be received by BCC and the remaining half would be placed into the West of England EDF pool.

At present, BCC estimate that through the operation of the Filton Arena and associated food and beverage services, £0.6m per annum would be raised in business rates, payable to BCC. It should be noted that these are initial estimates based on a high level assessment of the current Filton Arena proposition. BCC has indicated to KPMG that further work and specialist advice will need to be sought to more robustly estimate the potential business rate income that could be achieved through the Filton Arena.

Over a 25 year appraisal period, £8.8m in real terms would be raised in business rates as a result of the Filton Arena and the associated food and beverage services. However, as mentioned above, this is based on initial figures based on BCC and will require further work to finalise.

6 Value for money assessment

6.1 Summary of the economic impacts

In Section 2 above we have assessed, adopting a high level appraisal approach, the potential economic impacts associated with the proposed development of the Filton Arena brought forward by YTL. The results of our analysis are summarised in Figure 22 below.

Based on our analysis, we have estimated that the Filton Arena could generate between £810.6m to £896.5m in net GVA (in NPV terms) and 1,312 to 1,495 FTE jobs in the West of England over 25 years.

Figure 22: Net GVA (in NPV terms) and employment (in FTEs) associated with the proposed development of the Filton Arena over 25 years

		Net GVA	25 years Net employment	Business rates
West of England	Construction	£66.6m	83	-
	Arena operation	£192.1m - £202.9m	254 – 301	£8.8m
	Attendee spending	£551.9m - £627.0m	975 - 1,111	-
	Total	£810.6m - £896.5m	1,312 - 1,495	£8.8m
Bristol	Construction	£59.7m	74	-
	Arena operation	£183.9m - £193.7m	248 – 294	£8.8m
	Attendee spending	£485.7m - £551.8m	858 – 977	-
	Total	£729.3m - £805.2m	1,180 - 1,345	£8.8m

Source: KPMG analysis

6.2 Value for money assessment

Using the estimates of the potential economic impacts that could be generated through the proposed developments, we have estimated the NPV associated with each. We have also estimated the BCR associated with the proposed Filton Arena. There are a number of assumptions and caveats linked to this, as detailed below, that should be considered when interpreting the results.

Given that, by nature, construction impacts are temporary and are generated over a short time frame, these impacts are often excluded from the assessment of value for money. Therefore, in our NPV and BCR estimates we do not take account of construction related economic impacts.

We note that a VfM assessment extends beyond consideration of the BCR. The financial and commercial cases for the proposals also need to be taken in to account, including other aspects of the project, such as affordability, deliverability and the expected level of risk.

6.2.1 Value for money assessment of the proposed Filton Arena development

We have assumed the only public sector cost associated with the Filton Arena development would be the £53m associated with the supporting transport infrastructure. This public sector cost forms the cost basis of our BCR assessment.

It should be noted that the BCR does not reflect the full economic benefits that could arise from the infrastructure package the LEP funding would potentially be used to finance. The economics benefits

of this package (which span beyond those linked to the Arena) are not quantified within our study. The BCR is therefore, not a comparative assessment of the benefits and costs.

The results of our analysis are set out in Figure 23 below.

Figure 23: Value for money assessment of the proposed Filton Arena development at a West of England level

	25 year
Total net GVA (in NPV terms)	£744.0m - £829.9m
Public sector costs	£53.0m
BCR	14.0:1 – 15.7:1
Economic NPV	£691.0m - £776.9m

Source: KPMG analysis

We estimate that the Filton Arena development, excluding the construction related economic impacts, could deliver:

- An economic NPV of up to £776.9m over a 25 year time frame.
- A BCR of up to 15.7:1 over a 25 year time frame.

As detailed in Section 5.3, the assessment of the potential economic impacts generated through the Filton Arena is predicated on the deliverability of the scheme and the achievement of YTL's projections in terms of employment and attendees.

Our assessment captures the economic impacts associated with the ongoing operation of the Filton Arena, as well as economic impacts generated through Arena attendee spending in the local economy. Given that the development of the Filton Arena is still in the relatively early stages of planning, we have been unable to assess all possible impacts associated with the development. The following impacts have not been included in our economic impact assessment:

- any wider social impacts that the Filton Arena may deliver;
- any catalytic impacts that may arise from the Filton Arena (assessed qualitatively in Section 5.3.3), including the increased rate of development on the Filton site and the catalysed development of the East and West Bays of the Brabazon Hangar; and
- the economic benefit associated with the three transport infrastructure projects identified by YTL as key to the delivery of the Filton Arena.

These impacts would be additional to the economic impacts estimated within our study. As the plans for the Filton Arena progress and further data and evidence is available, it will be important to assess the full scope of the potential economic and social impacts associated with the Filton Arena.

Also, in terms of the financial and commercial aspects of the proposition (detailed in Section 4) in summary, it should be noted that:

1. Given the early stages of development for both the Filton Arena and alternative use of the Temple Island site, there is a limited available evidence base for analysis, such as detailed financial analysis, cost plans and report. As a result, we have been unable to carry out a detailed financial and commercial assessment of the propositions.
2. The Filton Arena will be primarily funded by private capital and BCC is supporting the development and delivery of the public transport infrastructure within the area.

3. Under the Filton Arena proposition, the LEP funding will be reallocated, subject to approval and a revised business case, and invested in supporting the delivery and development of transport infrastructure rather than an arena. This figure will be capped at £53m. At present, there is no evidence that additional spending commitment by BCC will be required to deliver the Arena on the Filton site.
4. The propositions are still in the early stages of development, meaning that there is a lack of clarity over the details of the propositions, in particular in reference to the delivery of the propositions. As a result, there is a high delivery risk associated with the project. This is somewhat mitigated by YTL's long term interest in the Filton site.
5. BCC will want to negotiate firm commitments from YTL in advance of granting the exclusivity period so as to avoid any further concessions as project plans are developed by YTL.

6.3 Comparative assessment of the Filton Arena development and the Temple Island Arena

When making public spending decision it is helpful to consider the relative value for money that could be achieved through alternative schemes. Therefore, we have assessed the value for money of the Filton Arena development within the wider context of the proposition by comparing the BCR and economic NPV to those estimated for the proposed Temple Island Arena. The same caveats and assumptions associated with the Filton Arena assessment (detailed above) and for the Temple Island Arena (as detailed in our Temple Island Arena: Value for Money Assessment report) apply to this comparison.

Figure 24 below sets out the key value for money indicators associated with all three propositions over a 25 year period.

Figure 24: Comparison of the value for money of the Temple Island Arena and Filton Arena over 25 years

	Temple Island Arena	Filton Arena
Total net GVA (in NPV terms)	£489.1m	£744.0m - £829.9m
Capital costs	£148.0m	£53.0m
BCR	3.2:1	14.0:1 – 15.7:1
Economic NPV	£282.6m	£691.1m - £776.9m

Source: KPMG analysis

The analysis suggests that the NPV of the Temple Island Arena project is comparatively lower than the Filton Arena project. This suggests that, based on the evidence currently available to inform the assessment, in cost and economic terms, the Filton Arena presents better value for money relative to the Temple Island Arena project.

There is considerable difference in the stage of development of the plans for the propositions and the details on which the assessments are based. In comparison to the Filton Arena development, the Temple Island Arena is a well-developed project and as a result could be considered, at this point in time, to be more deliverable.

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Assessment of alternative development plans for the Temple Island site

**KPMG report for Bristol City
Council**

June 2018



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1 Executive summary

1.1 About the study

Bristol City Council (BCC) has developed plans, and secured £53.0m of funding from the West of England Local Enterprise Partnership (LEP) for a proposed 12,000 (10,000 seated) capacity arena to be situated on the former Diesel Depot site within the Bristol Temple Quarter Enterprise Zone (BTQEZ), located close to Bristol Temple Meads train station (referred to as either “Arena Island” or “Temple Island”).

KPMG was appointed by Bristol City Council (BCC) in 2017 to perform a Value for Money assessment of proposals to develop an arena at Temple Island. During the course of this review BCC informed KPMG of alternative proposals to provide an arena elsewhere and the use the Temple Island site for mixed use development comprising of residential, office and retail space and options for including a conference centre and hotel space.

This report provides a review of the alternative development proposals for the Temple Island site. The KPMG review covers the following main areas:

- A comparative assessment of the strategic case for the alternative Temple Island development versus the current plans for an arena at Temple Island
- Identification, and assessment, of the key financial and deliverability risks of the alternative development proposal and the extent of commercial readiness of the alternative Temple Island development
- An assessment of the strength of the economic case for the proposed alternative Temple Island development, including consideration of ‘additionality’
- Comparison of the levels of public investment required for the alternative Temple Island development compared to the arena at Temple Island

Further details of these alternative proposals, including the size of developments, mix of uses, timelines and funding requirements, and the scope of KPMG’s study are set out in Section 2.2 of this report.

Our study is based on information and data made available to KPMG by BCC in the period up to 11 May 2018, as well as various sources of external data, such as from the Office of National Statistics (ONS). A list of the information and data provided to us is set out in Section 2.2.

It should be noted that as the alternative development proposals for the Temple Island site are still in relatively early stages of planning, there was limited data and information available. As a result, we have only been able to conduct a high level review based on the available information. As the plans progress, it will be important to revisit the assessment and the findings and conclusions may change.

1.2 Key findings: The strategic case for the alternative development proposals

We have considered the extent to which the proposed alternative development on Temple Island could deliver the key stated objectives of BCC for the Temple Island site, the BTQEZ and for Bristol as a whole.

We consider that the developments could contribute towards the achievement of specific key commitments set out by BCC in its Corporate Strategy (2018-2023)¹. In particular, as we assess in detail in Section 3.2, it could contribute toward the following commitments:

- the delivery of new housing, including affordable housing, in Bristol, albeit over a longer timeframe than the 2020 target period currently set out by BCC;
- the development of a diverse economy that offers opportunity to all and makes quality work experience and apprenticeships available to every young person, linked to the creation of new employment space and associated jobs. However, the delivery of work experience and apprenticeships will depend on occupants of the development providing these opportunities.
- reducing social and economic isolation and helping connect people to people, people to jobs and people to opportunity, also linked to provision of new employment space and job creation, increased economic activity in Bristol, and opening up access to the site.

Due to the early stage of the development of the proposals, the achievement of these objectives has a significant degree of uncertainty. We note that BCC could consider how certain obligations could be put in place to secure the delivery of the objectives, for example, linked to granting planning permission or as part of developer contracts.

There is a strategic rationale for some degree of public sector funding to bring forward the alternative development of Temple Island, on the basis of market failure. The Temple Island site has been derelict for over 15 years. In addition, there are potential wider benefits that would be generated with the development of the site (as assessed in our economic impact analysis in Section 5).

1.3 Key findings: Financial and deliverability risks and commercial readiness of the alternative development of Temple Island

Following professional advice, BCC has stated to KPMG a reasonable degree of confidence² in the deliverability of the alternative proposition at Temple Island, despite being at an early stage. A developer led mixed use scheme is a common approach to city centre development and offers a lower risk alternative for BCC than developing an arena on the site.

BCC's plans for the site are based on professional advice received to outline the potential options available to it at the land at Temple Island in the event the Arena did not proceed. The Council's financial forecasts underpinning our analysis are based on a net cost to the Council from the development of up to £25.6m, being a repurposing of the same capital allocation set aside for the Temple Island arena proposal on the same site. We note that initial analysis by professional advisers, informed by current information and market conditions, suggests that in contrast to the plans potentially costing BCC £25.6m, BCC could receive a significant return from the scheme (whether through land sale, overage or otherwise). BCC's current forecasts therefore appear prudent, although given the early stage in solution development this is perhaps sensible.

¹ Bristol City Council (2018) Corporate Strategy 2018-2023.

² Based on discussions held with BCC

1.4 Key findings: The economic assessment of the proposed alternative development of Temple Island and Value for Money

KPMG assessed the potential economic impacts associated with the potential mixed use developments of residential, office and retail space on the Temple Island site, drawing on the development plans emerging from BCC's initial "land use optioneering exercise". Due to the early stage of planning, limited information and data were available from BCC to assess the economic impacts. Therefore, a high level appraisal approach was adopted and the results of our analysis are indicative only.

Our approach to assessing the potential economic impacts associated with the Temple Island development has been conducted in accordance with the principles set out in the HM Treasury Green Book³. Specifically, we assess the potential additional direct, indirect and induced economic impacts⁴ of the proposed development in terms of Gross Value Added (GVA) and Full Time Equivalent (FTE) employment, both for the construction and ongoing operation of the development. BCC also provided initial estimates of the business rate income expected to be generated by the site. We note that the estimates of potential business rates are based on a high level assessment and are subject to further analysis by BCC.

A summary of the estimated net GVA impacts (in Net Present Value (NPV) terms), net employment (in FTE terms⁵) and BCC estimated business rate income is shown in Figure 1 below⁶.

Figure 1: Net GVA (in NPV terms), employment (in FTEs) and business rate income associated with the proposed alternative development of Temple Island, on an annual basis and over 25 years

		25 years		
		Net GVA	Net employment	Business rates
West of England	Construction	£59.6m	75	-
	Operation	£875.3m	2,026	£22.1m
	Total	£935.0m	2,101	£22.1m
Bristol	Construction	£56.5m	71	-
	Operation	£861.9m	2,003	£22.1m
	Total	£918.4m	2,074	£22.1m

Source: KPMG analysis

Based on the quantified economic impacts and the expected level of public sector contribution of £38.1m; comprising of public funding of up to £25.6m that could be available as an investment to bring the development forward, and the contribution of the land (valued at £12.5m⁷). We estimate that the proposed alternative development of the Temple Island site, excluding any construction impacts and taking into account the possible £38.1m of public contribution, could yield a BCR of 23.0:1 and NPV of GVA of £837.2m across the West of England over a 25 year period.

³ HM Treasury (2018) The Green Book: Central Government Guidance on Appraisal and Evaluation.

⁴ Direct economic impacts are the first round effect where the demand creates economic activity. Indirect impacts are the effects generated through the activity and output supported in the UK based supply chain as a result of procurement of inputs of goods and services (both for construction and ongoing operations). Induced impacts are multiplier effects that arise in the UK economy as a result of direct employees and employees in the UK supply chain spending a proportion of their wages in the UK. This spending generates additional economic activity for those businesses from which these employees buy goods and services and in these businesses' own wider supply chains.

⁵ This adjusts part time or temporary staff into an annual full-time equivalent based on the proportion of full-time hours worked over a year.

⁶ We have presented our analysis in net terms, meaning that our analysis of GVA and employment take into account the 'additionality' of impacts. We have adjusted our GVA and employment estimates for leakage and displacement. Our assumptions of additionality are set out in Section 5 below.

⁷ The current estimate of land value are based on a high level assessment undertaken by third party advisors for BCC. A full Red Book evaluation of the potential land value has not been undertaken, therefore the £12.5m should be viewed as an initial estimate and is subject to change. We note that this is a conservative estimate and at the lower end of range of potential values estimates presented by BCC third party advisors.

It should be noted that our quantitative assessment excludes a range of impacts that it was not possible to assess at this stage due to either a lack of data and information or as they were outside the scope of our study. Specifically, the analysis does not take account of:

- any wider social impacts that the development may deliver;
- any catalytic impacts that may arise (assessed qualitatively based on views provided by BCC);
- the potential impacts generated through the sale or letting of residential units developed on the site; and
- any spending related impacts that may arise if a conference centre is developed that results in increased visitors to Bristol.

These impacts have the potential to increase the economic impact and resultant Value for Money (VfM) of the proposed alternative development of the Temple Island site. In addition, the VfM of the proposed alternative development of the Temple Island site would change if there is any public sector contribution beyond the £25.6m of possible public sector funding identified, say for example if required to support the delivery of a conference centre on the site.

Full details of our analytical approach and the detailed results are set out in Section 5 of the report.

1.5 Summary conclusions

The alternative development plan for Temple Island is still in relatively early stages of planning resulting in only the limited data and information set out above being made available to us for the purposes of our study. This is not unusual for a project at this stage of development, however, as a result we have only conducted a high level review of the proposals for the site and our assessment can be viewed as indicative only and should be noted when comparing the proposition against the assessment of the Temple Island arena.

Potential for wider objectives of BCC to be met through the alternative developments proposed for Temple Island: The alternative development at Temple Island has the potential to contribute towards the wider objectives of BCC, for example housing and economic and social connectivity. In addition, the alternative development at Temple Island has the potential to meet BCC's specific objectives for the Temple Island site and contribute towards the BTQEZ employment targets.

Potential for higher economic impact of the alternative developments on Temple Island compared to an arena: Based on the scope of our quantitative analysis, we have estimated that the construction and the operation of the Temple Island development could generate £935.0m in net GVA (in NPV terms) and 2,101 FTE jobs in the West of England over 25 years. This net GVA is £343.9m higher than the net GVA estimated for the Temple Island Arena.

Lower public sector funding requirements, although uncertainty attached to this: At present, BCC has stated to KPMG that the development would be brought forward by the private sector. No new public sector funding would be required to bring this forward, although up to £25.6m of existing public sector funding allocations specifically linked to the Temple Island site could be available if required, depending on the outcome of BCC's commercial negotiations with potential private sector developers. We consider that further work will need to be undertaken by BCC to assess whether the development plans would be commercially viable for the private sector to deliver and to confirm the required level of public sector funding. We note that a mixed use scheme is a common approach to city centre development and offers a reduced risk to BCC than developing an arena on the site, albeit the proposals are at an earlier stage of development.

Comparatively higher VfM metrics of the alternative developments on Temple Island compared to an arena: Based on the scope of quantified economic impacts, we estimate that the alternative development proposals could deliver a BCR of 23.0:1 and economic NPV of £837.2m over a 25 year

period. This compares to an estimated BCR of 3.2:1 and economic NPV of £282.6m for the Temple Island arena over a 25 year period. In purely economic terms the alternative Temple Island development would be preferred over an arena on the site.

Figure 2: Comparison of the value for money metrics for the Temple Island Arena and the alternative mixed-use development, over 25 years

	Temple Island Arena	Alternative Temple Island development
Total net GVA (in NPV terms) ⁸	£489.1m	£875.3m
Capital costs/ public sector contribution	£172.5	£38.1m
BCR	3.2:1	23.0: 1
NPV	£282.6m	£837.2

Source: KPMG analysis.

⁸ This is the net GVA associated with the operation of the alternative development for Temple Island. GVA generated through construction is temporary and should not be included in the value for money assessment.

2 About the study

2.1 Development proposals for the Temple Island site

An arena for Bristol

Bristol is the only UK core city that does not have a major arena⁹.

Bristol City Council (BCC) has developed plans, and secured £53.0m of funding from the West of England Local Enterprise Partnership (LEP) for a proposed 12,000 (10,000 seated) capacity arena to be situated on the former Diesel Depot site within the BTQEZ, located close to Bristol Temple Meads train station (referred to as either “Arena Island” or “Temple Island”).

In August 2017, KPMG was commissioned by BCC to undertake a VfM review of this proposed Temple Island Arena project. The study was intended to help provide an evidence base for BCC to allow it to make future decisions on the investment in line with its duty of best value.

Details of the scope of this study and KPMG’s findings are set out in KPMG’s Temple Island Arena VfM study and Appendices.

Alternative development plans for the Temple Island site

BCC has initiated work to consider the potential uses for the Temple Island site should a decision be made not to locate an arena on this site.

Although alternative use plans for the Temple Island site have not yet been fully developed, BCC has undertaken an initial “land use optioneering exercise” to consider and develop potential options for the site. The initial options for the Temple Island site include mixed use developments of residential, office and retail space. Options for including conference and hotel space on the site are also being developed. The initial plans provided to KPMG by BCC indicate that the site could be developed to accommodate approximately:

- 460 residential units; and
- 26,000 sq m of mixed use commercial floorspace, which could include office, retail and hotel space, as well as a conference centre and business incubation space.

As we detail further in Section 4, we understand from BCC that it is anticipated that all development would be brought forward by the private sector. As a result, it is assumed that no new public sector investment would be required for the development of the site. However existing public sector funding allocations specifically linked to the Temple Island site could be made available, if required. These allocations total £25.6m. As noted in Section 4, BCC’s professional advisors believe the site could yield a substantial return for the Council.

2.2 Scope of work

To supplement our VfM review of the proposed arena on the Temple Island site, KPMG was commissioned by BCC to undertake a review focusing on a VfM assessment of an alternative use of the Temple Island site. In particular, our study covers the following main areas:

⁹ Dav is Langdon and IPW... (2013) Bristol Arena Outline Business Case: Final Report November 2013.

- a comparative assessment of the strategic case for the alternative Temple Island development versus the current plans for an arena at Temple Island;
- identification, and assessment, of the key financial and deliverability risks of the alternative development proposal and the extent of commercial readiness of the alternative Temple Island development;
- an assessment of the strength of the economic case for the proposed alternative Temple Island development, including consideration of 'additionality'; and
- a comparison of the levels of public investment required for the alternative Temple Island development compared to the arena at Temple Island.

Our work draws on information and data provided to us by BCC, both in the form of written documents and orally in meetings in the period up to 11 May 2018. Specifically we were provided with the following information:

- the proposed number of residential units and floorspace that could be developed on the Temple Island site;
- the estimated level of employment that could be generated through the alternative development of Temple Island;
- the estimated cost of constructing the alternative development on the Temple Island site;
- evidence of the market demand for the proposed developments; and
- qualitative information on the potential wider developments that may be catalysed through the proposed development on Temple Island.

The alternative development plan for Temple Island is still in relatively early stages of planning resulting in only the limited data and information set out above being made available to us for the purposes of our study. This is not unusual for a project at this stage of development, however, as a result we have only conducted a high level review of the proposals for the site and our assessment can be viewed as indicative only.

As plans progress and additional information becomes available, the underlying data and information our analysis is based upon is likely to change. Therefore, our analysis would need to be revisited and our findings may change as a result.

Additional to the data provided by BCC, we sourced data and information from a number of external public sources. This includes official statistics published by the Office for National Statistics (ONS), data from the Homes and Communities Agency (HCA¹⁰) and existing research, analysis and economic literature from a range of sources.

¹⁰ Homes and Communities Agency is now Homes England

3 The strategic case for the alternative development of Temple Island

3.1 Overview of the proposals, timings and funding requirements

In order to assess the strategic case for an alternative development on the Temple Island site, it is important to first establish the scale of development, types of use, the timeframe over which this is expected to be brought forward and the public sector costs associated with this. Building on the overview presented in Section 2.1, we detail below our current understanding in each of these areas.

If a decision is made by BCC to not proceed with the proposed development of an arena on the Temple Island site, this would leave the site proposed for the Temple Island site vacant and available to pursue alternative development plans. As detailed in Section 2.1, BCC has undertaken an initial “land use optioneering exercise” to consider and develop potential options for the site in the event that the Arena project is not taken forward on the site. This includes the possible mix, scale and density of the developments that could come forward.

The initial options for the Temple Island site include mixed use developments of residential, office and retail space. In addition, options for including conference and hotel space on the site are being considered.

If the proposed development were pursued, BCC has indicated to KPMG that it would target the commercial development on the site to businesses in the creative and digital sectors as well as financial and professional services. This is because it considers that these sectors will benefit from close proximity to the new University of Bristol campus, as well as Temple Meads Station.

BCC is exploring options for the commercial development to be taken up by a mix of large multinational corporations and smaller, creative businesses. Smaller businesses would also have access to the proposed dedicated space for commercial incubator space, which BCC has indicated will focus on creative and digital businesses and seek to support businesses in the early stages of development and growth.

BCC has indicated to KPMG that, if the proposed developments were taken forward, it expects development to come forward from 2022, with all developments completed by 2025. These are initial estimates of the timing of the development. As the development is still in the early stages of planning there is some uncertainty around the delivery timetable and a full, in-depth assessment of the market demand and development appetite for a commercial development of this type and scale has not yet been undertaken. When this study is undertaken, and as plans for the development progress, the delivery timetable may shift.

BCC has stated to KPMG that it considers that no further public sector funding will be used for the development on Temple Island, and it is intended that the development would be brought forward by the private sector. However, we understand that existing public sector funding allocations specifically linked to the Temple Island site, such as the CIL funding, could be available. In our assessment, we have assumed that the £25.6m of BCC capital contribution to the Temple Island Arena scheme are repurposed to this alternative development, to be used as a contribution towards a conference centre, land remediation, abnormals or otherwise.

Details of the public sector funding that could be linked to the Temple Island site are set out below:

- £15.9m of net sales proceeds from Cattle Market Road site to the University of Bristol;
- £1.8m of Transport Capital Funding; and
- £8m of CIL.

Any alternative scheme will also be expected to deliver funding to the Council through CIL funding and S106 payments. The amounts of income generated will depend upon the scheme delivered, but CIL payments generated through commercial uses on the site could be considerable. These funds could then be available for investment in other community infrastructure projects within Bristol. In addition to this, additional business rates, Council tax and New Homes Bonus income could be expected to be delivered through the proposed alternative development of Temple Island. We have assessed the potential level of business rates that could be generated through the scheme in Section 5.4 below.

As detailed in Section 4, further work will need to be undertaken by BCC to assess whether the development plans would be commercially viable for the private sector to deliver and whether the funding outlined above will be required and if further funding is needed to bring forward the development.

3.2 Delivery of BCC's key objectives for Bristol

As part of our assessment of the strategic case for the alternative proposed development at Temple Island, we have considered how this proposal may affect the opportunity for BCC to deliver its key objectives, for example, in terms of housing and employment growth. To do this, we have considered the extent to which the proposed alternative development on Temple Island could deliver the key stated objectives of BCC for the Temple Island site, the BTQEZ and for Bristol as a whole.

3.2.1 BCC's objectives for the Bristol Arena

In the Full Business Case (FBC)¹¹ submitted to the West of England LEP as part of the application for the Economic Development Fund (EDF) funding for the Temple Island Arena, BCC set out a number of objectives for the Arena. The objectives for the Temple Island Arena were not solely associated with an arena but also encompass objectives more broadly related to the Temple Island site. Specifically, these objectives were for the arena to:

- Have a public realm interface with the rest of the site, which encourages visitors and creates a “destination” experience for “Arena Island”.
- Assist in making the BTQEZ more accessible and drive improvements [in] permeability to the south of Temple Meads station.

BCC's initial plans for the Temple Island development will have an element of external public space, as well as retail space and a limited provision of cultural facilities. However, under current plans, the retail and leisure offering on the site will be relatively modest, with the majority of the development being focused on commercial office space and residential uses. By nature, these types of developments do not typically lend themselves to a “destination experience”.

However, a conference centre and hotel development are being considered on the site. These developments could make the site more of a “destination” – drawing visitors, both from Bristol and outside of Bristol, to the site for events. We consider that, based on current plans for the Temple Island site, it could be possible to create a “destination experience” if developed and managed with this objective in mind. However, this destination experience would be of a different nature to what could be created by locating an arena on the site. Furthermore, as it is intended that the alternative

¹¹ Bristol City Council (2016) Bristol Arena Full Business Case

development of Temple Island would be brought forward by the private sector, BCC would need to work with the private developer(s) to ensure that this objective is met.

The proposed Temple Island site development could assist in making the BTQEZ more accessible and drive improvement in permeability to the south of Temple Meads Station and to the south of Bristol. Current plans for the development on Temple Island include improved pedestrian access to the Temple Meads Station complex from the site. This would improve the permeability between the site and station. BCC has informed KPMG that it considers that the development would likely open up access to the south of the Temple Island site and may influence the development of sites to the east in particular sites on the other side of the River Avon.

It should also be noted that BCC could elect to use part or all of the £25.6m of potential funding, or of any capital receipt of the land realised through the delivery of the alternative scheme on Temple Island to invest in or support other schemes (within the Temple Quarter or wider BCC area). These investments could contribute towards the delivery of BCC objectives for the arena on Temple Island. Therefore, any objectives that are not met through the alternative development at Temple Island could potentially be met through other schemes. We note, however, that KPMG has not been provided with any evidence of what these schemes could be or the potential outcomes of schemes, nor is it within the scope of this report to examine them.

3.2.2 Overview of BCC's key stated objectives for Bristol

BCC's Corporate Strategy (2018-2023) ("the Strategy") sets out the key strategic priorities and vision for the City over the next five years. It sets out BCC's "contribution to the city as part of the One City Plan and is [its] main strategic document. It informs everything the council does and how [it] plans for the future"¹².

The Strategy has four themes, as stated below:

- "Empowering and caring: Working with partners to empower communities and individuals, increase independence, support those who need it and give children the best possible start in life.
- Fair and inclusive: Improving economic and social equality, pursuing economic growth which includes everyone and making sure people have access to good quality learning, decent jobs and homes they can afford.
- Well-connected: Taking bold and innovative steps to make Bristol a joined up city, linking up people with jobs and with each other.
- Wellbeing: Creating healthier and more resilient communities where life expectancy is not determined by wealth or background."

Within these themes, the Strategy sets out a number of key commitments. We have identified three key commitments which are relevant to the Temple Island site. In Figure 3 below, we have set these commitments, as well as our assessment of the extent to which these objectives may be met by the proposed alternative development on Temple Island.

¹² Bristol City Council (2018) Corporate Strategy 2018-2023.

Figure 3: KPMG assessment of the extent to which the proposed development of Temple Island may meet BCC key commitments

BCC Commitment	KPMG assessment
Make sure that 2,000 homes – 800 affordable – are built in Bristol each year by 2020	<p>Initial analysis suggests that the Temple Island site development could feature approximately 460 residential units. Based on the initial plans, it is expected that this housing will come forward from 2022 onwards. This means that it will not contribute toward achieving BCC's 2020 housing target, but it will increase housing availability in the period after this.</p> <p>Current development proposals will aspire to ensure that 30% of all residential units built will be affordable. This would support BCC's affordable home target, although after the 2020 period. We also understand that BCC will seek to ensure that housing proposals are compliant with Policy BSC17 of the Core Strategy¹³ which states that at least 30% of housing be affordable (within the Bristol South area, which is where the Temple Island site lies).</p> <p>In addition, BCC has indicated to KPMG that some of the residential units may be appropriate for retirement living.</p>
Develop a diverse economy that offers opportunity to all and makes quality work experience and apprenticeships available to every young person	<p>The proposed Temple Island development will include a large offering of office and commercial floorspace, creating new employment space in the city. BCC has indicated to KPMG that it is envisaged that this office development would be aimed at firms in the financial and professional services, and the creative and digital sectors. These sectors are two of the West of England LEP's priority sectors as set out in its Strategic Economic Plan (SEP)¹⁴. As we detail in Section 6, our analysis suggests that this development would also generate additional economic activity and employment.</p> <p>As the proposals are still in the early stages, at present there are no specific plans of how the development may offer opportunity to all and provide quality work experience and apprenticeships to young people. As plans for the development progress and businesses begin to register interest in the office space, there may be a clearer view as to how this objective may be delivered. BCC could consider how certain obligations could be put in place to secure the delivery of the objectives, for example, linked to granting planning permission or as part of developer contracts.</p>
Reduce social and economic isolation and help connect people to people, people to jobs and people to opportunity	<p>The plans for the site development include a large offering of office and commercial space. BCC has estimated that there will be employment of 1,804 direct gross FTEs on the site. To the extent to which this will support additional employment in Bristol, rather than displacing employment from other parts of the area, the development will provide increased employment opportunities for the local population. This could reduce economic isolation and inequality, however, it will depend on the types of jobs created and the skill levels required. If these jobs are filled by those from lower income and/or more disadvantaged population groups the creation of the new</p>

¹³ Bristol City Council (2011) Bristol Development Framework: Core Strategy.

¹⁴ West of England Local Enterprise Partnership (2014) West of England Strategic Economic Plan 2015-2030.

employment space could help to reduce social and economic inequality and work towards the BCC inclusive growth agenda.

Any work experience placements or apprenticeships offered by firms located on the developed site may also help to connect people to jobs and opportunity. The extent to which these opportunities will be provided is unclear at this stage, given the early stage of the development proposals.

We also understand that BCC consider that the proposed Temple Island development could complement measures already taken or proposed to improve access between Temple Island and Temple Meads Station, as well as access to the city centre from the south of the site. This will improve connectivity for those living in South Bristol. We understand from BCC that South Bristol is one of the relatively more deprived areas of Bristol, therefore it is possible that this improved connectivity may contribute, to some extent, to reducing social and economic isolation for this area by improving access to the city centre and employment spaces.

Source: Bristol City Council (2018) Corporate Strategy 2018-2023.

3.2.3 Objectives of the Bristol Temple Quarter Enterprise Zone

The Temple Island site is located within the boundaries of the BTQEZ.

BCC envisages the BTQEZ becoming a new city quarter, with the aim of providing opportunities for work, study, housing and leisure for the local population, as well as increasing access to the city centre and Temple Meads Station¹⁵.

One of the key aims of the BTQEZ is to attract 22,000 jobs over its lifespan¹⁶. The proposed alternative development of Temple Island would contribute towards this aim by generating an estimated 1,804 gross direct jobs (in FTE terms).

In addition, BCC has stated that it aims to focus the Temple Island commercial development on the creative and digital sectors and the financial and professional services sectors. This will be complimentary to the BTQEZ, which focuses on the following key sectors¹⁷:

- creative and digital;
- high tech;
- low carbon; and
- professional services.

The alignment between the focus of the BTQEZ and the target sectors for the commercial development of the Temple Island site, may increase the attractiveness of the site to relevant businesses and help to create synergies through the complementarities between occupants of the developments.

¹⁵ <https://www.bristoltemplequarter.com/about/vision/>

¹⁶ <https://www.bristoltemplequarter.com/portfolio-items/skills-and-training/>

¹⁷ <https://www.bristoltemplequarter.com/about/useful-resources/>

3.3 Rationale for public intervention

As part of the assessment of the strategic case we have also considered the rationale for public sector intervention to bring forward the alternative development of the Temple Island site compared to developing an arena on this site.

We note that BCC's alternative development plans for the Temple Island site envisage that the proposed developments would be brought forward, and funded, by private sector developers. However, BCC has indicated to us that in the instance that public sector funding is required to support the development of Temple Island and/or increase the economic return, it envisages the public sector funding grants, totalling £25.6m, currently in place for the Temple Island Arena and directly associated with the Temple Island site could be made available, for example for land remediation works. BCC could also contribute the value of the land receipt towards the scheme. BCC's advisors have indicated that the Council could expect to benefit from a substantial return from this site, however BCC has not modelled any income from the development given the early stage of its plans. Further details are provided in Section 4.

The public sector grants that could be made available total £25.6m and, therefore, if used would represent a lower level of public sector funding to develop the site for alternative use compared to developing an arena on the site. If deliverable, and shown to contribute towards BCC's objectives (albeit contributing to different objectives to some extent) and a similar or higher benefit cost ratio (BCR), a private sector led proposition for the development of the Temple Island site weakens the strategic rationale for public sector intervention to develop an arena on Temple Island.

In terms of the economic benefits associated with the alternative development of Temple Island we have estimated the potential GVA and employment impacts and business rate income it could deliver in Section 5. We also note that one of the key arguments for public sector intervention to bring forward an arena on the Temple Island site, put forward in the FBC, was that it will act as a catalyst for the development of the wider area. We consider that this rationale applies to an alternative development on the site. We also assess the potential catalytic impacts of the alternative development in Section 5.5. Although it is not possible to quantify these impacts at this stage due to a lack of detailed evidence, there are indications that wider development could be catalysed in the surrounding area.

Therefore, if some degree of public sector funding to bring forward the development of Temple Island is required, there is likely to be a strategic rationale for intervention on market failure grounds given the positive externalities that would be associated with the development of the site. However, this would need to be reassessed when funding requirements are clear, and considered as part of a wider value for money assessment of the proposals at the stage at which more details and evidence is available.

In terms of the deliverability of the Temple Island scheme we note that due to the early stage of the project there remain uncertainties. BCC should consider the viability of the proposed mixed use development on the site when considering the deliverability of the proposed Temple Island scheme. Additionally, BCC has indicated to KPMG that it recognises the need to consider a number of additional "technical factors" in relation to planning, including: assessing the environmental impact; noise and vibration; air quality; sustainability; ecology; flooding and contamination. These issues are not assessed with the scope of KPMG's work. We understand from BCC that work has already been undertaken to consider these factors.

We note that the well-connected location of the Temple Island site within the BTQEZ and its proximity to Temple Meads Station means that the site may become increasingly attractive to private investors in the future. As other developments, including the University of Bristol plans, progress, we consider that the need for public sector funding to support the development of the Temple Island site should be kept under review as proposals proceed.

4 Financial and commercial assessment of the alternative development of the Temple Island site

Whilst the work to develop an alternative use for the Temple Island site is at a very early stage, BCC commissioned third party advisors to outline the potential options available to it. Since that time BCC has then further developed these options internally.

BCC currently intends to appoint one or more private sector developers to construct the entire site, which will likely lead to the most intensive development, for example a greater number of homes and a significantly greater commercial area. This is a common strategy adopted by many local authorities to leverage private sector expertise and reduce the financial risk to BCC.

Development of a mixed use commercial and residential space has potentially lower construction risk than the arena option due to a more standardised construction and greater comparative benchmarks. However, given the infancy of development plans, significant estimate risk remains.

The Council's financial forecasts underpinning our analysis are based on a net cost to the Council from the development of £25.6m, being a repurposing of the same capital allocation set aside for the arena proposals on the same site. BCC has indicated that it may choose to spend some of this on preliminary works and abnormalities to de-risk the site for potential developers but that any decision would depend on the outcome of future commercial negotiations, and there may be no financial investment required by BCC at all. We note that professional advice secured by BCC suggests that in contrast to the plans costing the Council £25.6m, BCC could receive a significant return from the scheme (whether through land sale, overage or otherwise). BCC's current forecasts therefore appear prudent, although given the early stage in solution development this is perhaps sensible.

Overall we note that BCC have a reasonable degree of confidence in the deliverability of the alternative proposition at Temple Island, despite being at an early stage. A developer led mixed use scheme is a common approach to city centre development and offers a reduced risk to BCC than developing an arena on the site. BCC's early stage proposal is based on independent third party analysis highlighting BCC have taken appropriate advice in reaching this stage of development. BCC may be able to negotiate using less than the £25.6m committed to the site as part of the Temple Island Arena development or recover much of this through future land agreements.

5 Economic assessment of the alternative development of the Temple Island site

5.1 Our approach to assessing the potential economic impacts

As part of the scope of this report we were asked by BCC to assess the strength of the economic case for the alternative development proposals for Temple Island.

Our approach to assessing the potential economic impacts associated with the Temple Island development has been conducted in accordance with the principles set out in the HM Treasury Green Book¹⁸. Specifically, we assess the potential additional direct, indirect and induced economic impacts¹⁹ of the proposed development in terms of GVA and FTE employment.

Our analysis draws upon floorspace and employment estimates provided to us by BCC, estimated construction costs from BCC and publicly available data produced by the HCA and ONS.

Our analysis focuses on the potential economic impacts associated with:

- the construction of the proposed alternative development; and
- the ongoing operation of the proposed commercial development on the site²⁰.

We have been unable to quantitatively assess all of the potential economic impacts that could be generated through the proposed alternative development. The following aspects have not been included in our quantitative economic impact analysis:

- The potential revenue, and associated economic impacts, associated with the sale and/ or letting of residential developments. Further additional GVA may be generated through revenue raised from the sale or letting of the residential properties. We have not been able to factor these associated economic impacts in to our analysis at this stage due to lack of information on the likely mix of 1,2 and 3 bed residential properties that will be developed and on the potential market value of those residential developments over the appraisal period.
- Any additional economic impacts that may be associated with visitor spending in the local economy if a conference centre is located on the site. If the availability of these facilities were to increase the number of visitor to Bristol, there could be wider spending impacts associated with this, for example linked to hotel stays, retail and food and beverage purchases. Due to uncertainty over the development plans for a conference centre and a lack of associated data and information, we were unable to quantify these potential impacts.

¹⁸ HM Treasury (2018) The Green Book: Central Government Guidance on Appraisal and Evaluation.

¹⁹ Direct economic impacts are the first round effect where the demand creates economic activity. Indirect impacts are the effects generated through the activity and output supported in the UK based supply chain as a result of procurement of inputs of goods and services (both for construction and ongoing operations). Induced impacts are multiplier effects that arise in the UK economy as a result of direct employees and employees in the UK supply chain spending a proportion of their wages in the UK. This spending generates additional economic activity for those businesses from which these employees buy goods and services and in these businesses' own wider supply chains.

²⁰ We note that while the residential developments would also generate economic impacts through the residents' additional spending with local businesses, resulting from the increase in the local population, HCA guidance states that where a development is mixed use this additional spending should not be captured separately. It considers that only the economic output (GVA and employment) associated with the commercial aspects of the development should be estimated and not impacts from any residential aspects, to avoid the double counting of impacts in the analysis.

- Any wider developments on adjacent sites that may be catalysed as a result of the development of the Temple Island site. BCC has stated that it considers that the development of Temple Island would likely encourage the development of adjacent sites. However, which sites and the potential scale, type and timing of any catalysed development have not yet been identified. We have therefore been unable to quantify the potential impact. Section 5.4 below sets out any wider impacts in greater detail.

In line with the HM Treasury Green Book, we have assessed the additionality of the proposed alternative development i.e. the economic activity that is additional to the local economy and would not arise in the absence of the project being brought forward. This includes an assessment of:

- Displacement: the extent to which the project could offset economic activity elsewhere.
- Leakage: the extent to which impacts are generated outside of the spatial area which it is intended to benefit. We have assessed the potential economic impact of the alternative development of the Temple Island site at three levels; the UK level; the West of England level and the Bristol level. When referring to impacts at the Bristol level, we have used the UK Government definition of a sub-region²¹, this is equivalent to the area of Bristol covered by BCC.

In addition to displacement and leakage, the HM Treasury Green Book²² recommends that an economic impact assessment consider the deadweight of a project. Deadweight refers to the outcomes which would have occurred without the project being brought forward. The deadweight of the alternative Temple Island development would be the construction and operation of the arena on the site, the costs and benefits of which have been assessed in our Temple Island arena report. Rather than deduct the economic impacts associated with the Temple Island Arena to represent the deadweight, we consider that the relative net economic impacts should be compared.

The net economic impacts are presented in our analysis in Net Present Value (NPV) terms over a 25 year appraisal period, applying a social time preference rate (STPR) discount rate of 3.5%, based on the HM Treasury Green Book guidance.

We understand from BCC that the land use optioneering exercise is still ongoing and BCC is continuing to explore the potential use(s) of the Temple Island site. We have based our analysis on the most up to date information provided to us by BCC as at 11 May 2018. As noted in Section 2.2, due to the early stage of the plans, the data and information available to us was limited.

Given this, a high level appraisal approach was adopted. Therefore, the analysis should be viewed as indicative only, and is predicated on the deliverability of the scheme and the achievement of BCC's projections in terms of developed floorspace and the associated employment.

If the alternative development plans for Temple Island progress and as more data and information becomes available we recommend that the analysis is revisited and a more detailed assessment conducted.

5.2 Potential economic impacts associated with the construction of the Temple Island development

The construction of the alternative developments on Temple Island will directly generate economic activity. It will also generate indirect economic impacts through the supply chain, e.g. through the purchase of construction materials, as well as induced impacts associated with employees' spending wages in the wider economy.

²¹ A sub-region is defined as any spatial area that covers the very local (e.g. 5 miles) through to the local authority district.

²² HM Treasury (2018) The Green Book: Central Government Guidance on Appraisal and Evaluation.

However, any impacts will be generated for a limited time only - over the construction period. At present, information provided by BCC indicates that the construction of the alternative developments will be phased over a 6 year period, with all developments being brought forward by 2025.

To inform our estimates of the construction impacts BCC has provided us with cost estimates for residential and commercial developments, on a per square foot basis. We have applied these estimates to BCC data on the proposed amount of developed floorspace in order to estimate the total cost of construction. We estimate the total construction cost of the proposed Temple Island development to be £81.0m.

5.2.1 Gross GVA impacts associated with the construction of the Temple Island development

We have estimated the direct GVA associated with the construction of the development by applying the relevant GVA to output ratio for the construction industry to the overall estimated cost of construction. Indirect and induced GVA has been estimated by applying the Type I and Type II GVA multipliers²³ to the estimated direct GVA.

Overall, we estimate that £74.3m would be generated in gross GVA²⁴ over the construction period.

Figure 4 below sets out our gross GVA estimates split by direct, indirect and induced impacts.

Figure 4: Gross GVA associated with the construction of the alternative Temple Island development

	Direct	Indirect	Induced	Total
Gross GVA	£32.9m	£30.1m	£11.3m	£74.3m

Source: KPMG analysis

5.2.2 Gross employment impacts associated with the construction of the Temple Island development

In addition to GVA, the construction of the development will also generate employment for the duration of the construction period.

We have estimated the potential level of direct employment associated with construction based on the estimated direct GVA and the average GVA per FTE for the construction industry. Indirect and induced employment have been estimated by applying the industry Type I and Type II employment multipliers²⁵ to the estimated direct employment.

We estimate that 927 gross FTE temporary jobs would be generated through the construction of the alternative Temple Island development, over the construction period.

We have adjusted our employment estimates to be in permanent terms, by assuming that one permanent FTE job is over a 10 year period. Based on this approach, we estimate that 93 gross permanent FTE jobs would be generated through construction.

²³ Office for National Statistics (2017) 2013 Input-Output Analytical Tables: Multipliers and effects (product) and Scottish Government (2017) Input-Output Tables 1998-2014.

²⁴ Gross GVA has not been adjusted for additionality and is presented in nominal terms.

²⁵ Office for National Statistics (2017) 2013 Input-Output Analytical Tables: Multipliers and effects (product) and Scottish Government (2017) Input-Output Tables 1998-2014.

Figure 5: Gross employment (in FTE terms) associated with the construction of the alternative Temple Island development

	Direct	Indirect	Induced	Total
Gross employment	43	38	11	93

Source: KPMG analysis

5.2.3 Consideration of additionality and net economic impacts

As set out in Section 5.1 above, we have considered the additionality of any economic impacts associated with the construction of the alternative Temple Island development.

We have set out our assessment of the estimated level of additionality associated with the construction in Figure 6 below.

Figure 6: Additionality assumptions associated with the construction of the proposed alternative development on Temple Island

Additionality factor	Estimated level	KPMG assessment
Deadweight	-	The potential deadweight associated with the proposed development of the Temple Island site relates to the construction impacts that could be generated if alternative developments were to come forward. We note that at present there are two competing uses for the site – the arena development and the proposed development detailed in this report. Therefore, in our analysis, rather than deduct the economic impacts associated with the arena to represent the deadweight, we consider that the relative net economic impacts should be compared.
Displacement	10%	The construction activity is expected to take place over a relatively long time period and as a result we consider that there will be relatively low levels of displacement from other major construction projects across the West of England and the UK. Therefore, in line with our analysis of the displacement associated with the arena on the Temple Island site, we assume a low level of displacement in our analysis at 10%.
Leakage	17.5% for indirect and induced impacts at a West of England level.	Due to the location of the Temple Island development, construction will be undertaken in Bristol and as a result, we would expect that the direct impacts of construction to be retained in Bristol and the West of England. We have therefore assumed a zero level of leakage associated with direct construction impacts.
	25% for indirect and induced impacts at a Bristol level.	Through the supply chain, however, there will be a level of leakage associated with the indirect and induced impacts. It is unlikely that all of the building materials and other resources required in the construction will be sourced from Bristol or the West of England. Taking the factors that will affect the likely leakage of both direct and indirect impacts of construction into account, at the West of England level we assumed a low to medium leakage rate for the construction impacts of 17.5% for indirect and induced impacts. At a Bristol level, we have assumed a medium level of leakage of 25%. These rates are based on the levels detailed in the HCA additionality guidance ²⁶

Source: KPMG analysis

²⁶ HCA (2014) Additionality Guidance. 4th Edition.

By applying the additionality assumptions set out in Figure 6 above we have estimated the net GVA and employment associated with the construction of the proposed alternative development on Temple Island. Our estimates of net GVA for the total construction period are set out in Figure 7 below.

It should be noted our estimates of net impacts are based on current information, and assumptions of additionality levels. As plans progress, and more detailed information and evidence becomes available, it would be possible to more accurately estimate the net impacts associated with the construction of the proposed alternative development on Temple Island. Therefore, we may have over- or under-estimated the potential economic impacts associated with the construction of the development at Temple Island.

Figure 7: Net GVA associated with the construction of the alternative Temple Island development

	Direct	Indirect	Induced	Total
Net GVA				
<i>In the West of England (including Bristol)</i>	£29.6m	£21.8m	£8.2m	£59.6m
<i>In Bristol</i>	£29.6m	£19.6m	£7.3m	£56.5m
Net employment (in FTE terms)				
<i>In the West of England (including Bristol)</i>	39	28	8	75
<i>In Bristol</i>	39	25	7	71

Source: KPMG analysis

5.3 Potential economic impacts associated with the ongoing operation of the Temple Island development

5.3.1 Gross employment impacts associated with the Temple Island development

The operation of the businesses located in the commercial developments on the Temple Island site will generate ongoing economic impacts directly, as well as indirectly through spending with suppliers and in induced terms through employees' spending of wages within the economy.

BCC has provided KPMG with estimates of the direct employment it has forecast, over time, which could be generated as a result of the proposed development of the Temple Island site.

We understand that BCC has estimated this direct employment by applying the relevant HCA employment densities to the net internal area floorspace dedicated to different uses²⁷. The direct employment estimates take into account the occupancy rate of the developments²⁸. KPMG has not validated BCC's estimates of the direct employment associated with the Temple Island site development although we consider that the high level appraisal approach adopted by BCC is appropriate and reasonable given the level of information available at the early stages of the project.

BCC's direct employment estimates increase over time based on the phasing of the development coming forward. In year 1, BCC has estimated that 143 gross FTEs could be generated through the development of the Temple Island site, rising to 1,804 gross FTEs by year 6.

Using BCC's estimates of direct employment, we have estimated the wider employment that could be generated through the Temple Island site, in indirect and induced terms. Indirect and induced

²⁷ BCC have converted gross floorspace to net internal floorspace by applying a factor of 0.8.

²⁸ BCC has applied occupancy rates ranging from 50% to 100%.

employment have been estimated by applying the relevant Type I and Type II employment²⁹ multipliers to BCC's direct employment estimates.

Figure 8 below sets out the direct, indirect and induced employment estimates and the phasing of this employment over time. Overall, we estimate that the Temple Island development could generate up to 2,737 gross FTEs from year 6 of operation onwards.

Figure 8: Gross employment in FTE terms associated with the development of Temple Island

	Year					
	1	2	3	4	5	6 onwards
Direct	143	464	668	954	1,429	1,804
Indirect	57	187	270	388	585	740
Induced	16	51	74	104	154	194
Total³⁰	216	703	1,013	1,446	2,168	2,737

Source: KPMG analysis

5.3.2 Gross GVA impacts associated with the Temple Island development

GVA will be generated through the operation of the businesses that occupy the Temple Island development.

At present there is no forecast financial information linked to these commercial developments. Therefore, we have only been able to conduct a high level appraisal of the potential GVA impacts based on the direct employment estimates provided to us by BCC. We have applied the relevant level of GVA per FTE, sourced from the ONS, to the direct employment estimates to derive the direct GVA. We estimate that the gross direct GVA associated with the Temple Island development in year 1 could be £4.7m, rising to £54.2m in year 6.

Indirect and induced impacts have been estimated by applying the relevant Type I and Type II GVA multipliers³¹ to the direct GVA estimates. We have estimated that the development could generate between £2.4m to £28.7m in indirect GVA and a further £1.2m to £14.5m in induced GVA.

Figure 9 below sets out the estimates of gross GVA per annum over time.

Figure 9: Gross GVA impacts per annum generated through the Temple Island development

	Year					
	1	2	3	4	5	6 onwards
Direct	£4.7m	£14.7m	£21.0m	£29.5m	£43.3m	£54.2m
Indirect	£2.4m	£7.7m	£11.0m	£15.5m	£22.9m	£28.7m
Induced	£1.2m	£3.9m	£5.5m	£7.8m	£11.6m	£14.5m
Total³²	£8.3m	£26.3m	£37.6m	£52.8m	£77.8m	£97.4m

Source: KPMG analysis

5.3.3 Consideration of additionality and net impacts

The analysis detailed above presents the economic impacts in gross terms. In line with HM Treasury's Green Book, it is important to assess the additionality of the project.

²⁹ The multipliers applied are for SIC code 47: 'Retail trade, except of motor vehicles and motorcycles' and SIC code 70: 'Activities of head offices; management consultancy activities'.

³⁰ Totals may not add up due to rounding errors.

³¹ Office for National Statistics (2017) 2013 Input-Output Analytical Tables: Multipliers and effects (product) and Scottish Government (2017) Input-Output Tables 1998-2014.

³² Totals may not add up due to rounding errors.

We have assessed the additionality of the economic impacts associated with the operation of the proposed Temple Island mixed use developments to estimate the level of ongoing net employment and GVA.

We have considered the potential additionality of the development of the Temple Island site for mixed use purposes. Figure 10 below sets out our assessment of the additionality factors to apply in our analysis.

Figure 10: Assessment of the additionality of the operation of the proposed alternative development plans for Temple Island

Additionality factor	Estimated level	KPMG assessment
Deadweight	-	<p>The potential deadweight associated with the proposed development of the Temple Island site relates to the economic impacts that could be generated if alternative developments were to come forward. We note that at present there are two competing uses for the site – the arena development and the proposed development detailed in this report. Therefore, in our analysis, rather than deduct the economic impacts associated with the arena to represent the deadweight, we consider that the relative net economic impacts should be compared. This comparison is included in our overall VfM assessment detailed in Section 6.</p>
Displacement	20%	<p>Professional advisors for BCC have conducted an initial assessment of the potential for the commercial development on Temple Island to displace current or future activity in Bristol. A number of other developments currently coming forward across Bristol have been identified. However, in comparison to these other developments, Temple Island is still in the early stages of planning.</p> <p>BCC is of the view that a number of these other schemes may come forward in advance of any development at Temple Island. The developments remaining i.e. those that have not been taken forward by that time, are those which may give rise to some form of displacement. The level of displacement will depend on the nature of the offer of each to the market and demand for space at the time. We consider it reasonable to assume that there will be some level of displacement. BCC should consider an over-arching economic development strategy and plan to assess such impact.</p> <p>With regards to the modest retail offer on the site, BCC envisages that the space would likely be occupied by a mix of local, independent businesses and business chains. BCC has stated that any retail offer will be carefully chosen to ensure that it supports the wider site. Furthermore, BCC has stated that it intends to manage the retail offer on the site to ensure that any retail offering on the site does not directly compete with retail businesses in the city centre. Furthermore, the retail offer on the site is relatively small, and would therefore unlikely result in a high level of displacement from the city centre.</p> <p>If BCC is successful in delivering these plans and mitigating the extent to which the development on the Temple Island site would directly compete with other developments across Bristol (both for occupants and resident and visitor spending) it may be reasonable to assume that there would be a low level of displacement.</p> <p>There is a high degree of uncertainty of the plans for an alternative development at Temple Island and the potential for it to displace existing (and future) office and retail developments within Bristol and the West of England. Given the uncertainties we have assumed a</p>

		<p>medium level of displacement of 20%, based on HCA additionality guidance³³.</p> <p>We consider that it will be important to keep the expected levels of displacement under review as the plans progress as there is a high degree of uncertainty at this stage as it is highly dependent on who will occupy the developments.</p>
Leakage	<p>17.5% at a West of England level</p> <p>20% at a Bristol level</p>	<p>Given that the direct economic impacts will be generated by the proposed commercial and retail developments on the Temple Island site these direct impacts will be retained within Bristol.</p> <p>However, it is likely that the supply chains to support the direct activity, as well as the spending of direct and indirect employees, will span across the West of England and the wider UK economy.</p> <p>The level of leakage from the Bristol and the West of England areas will depend on the extent to which the businesses that occupy the commercial space on the Temple Island site source from the local region. If the businesses have predominantly local supply chains the level of leakage will be low. However, if the occupying businesses source a high proportion of their supply chains from outside of the West of England region, there will be a high level of leakage of economic impacts outside of the region. As we currently do not know which businesses will occupy the commercial space on the site, nor do we have any evidence as to the nature of their supply chains we are unable to accurately assess the level of leakage associated with the development.</p> <p>Given a lack of detail on this at this stage, we consider it reasonable to assume, a low to medium level of leakage (17.5%) at the West of England level and a medium level of leakage (20%) at a Bristol level. These leakage rates are sourced from the HCA Additionality Guide³⁴.</p> <p>We consider that it will be important to keep the expected levels of leakage under review as the plans progress</p>

Source: KPMG analysis

Taking into account the estimated additionality factors set out in Figure 10 we have estimated the net economic impacts associated with the proposed alternative use of the Temple Island site. It should be noted our estimates of net impacts associated with the ongoing operation of the proposed alternative development of Temple Island are based on current information, and assumptions of additionality levels. As plans progress, and more detailed information and evidence becomes available, it would be possible to more accurately estimate the ongoing net impacts associated with the alternative development of Temple Island. Therefore, we may have over- or under-estimated the potential ongoing economic impacts.

In net terms, we estimate that the proposed developments on Temple Island could generate between £6.0m and £70.4m in net GVA per annum in the West of England.

In total, over a 25 year period, the Temple Island development could generate £875.3m in net GVA (in NPV terms) and 2,026 net FTE jobs in the West of England.

³³ HCA (2014) Additionality guidance: 4th Edition.

³⁴ HCA (2014) Additionality guidance: 4th Edition.

Figure 11: Net GVA and employment (in FTE terms) associated with the operation of Temple Island in the West of England and Bristol

	Net GVA		Net employment (in FTE terms)	
	West of England	Bristol	West of England	Bristol
Year 1	£6.0m	£5.9m	160	158
Year 2	£19.0m	£18.7m	520	514
Year 3	£27.2m	£26.8m	750	741
Year 4	£38.2m	£37.6m	1,071	1,059
Year 5	£56.2m	£55.3m	1,605	1,586
Year 6 onwards	£70.4m	£69.3m	2,026	2,003
25 years (in NPV terms)	£875.3m	£861.9m	2,026	2,003

Source: KPMG analysis

5.4 Business rates generated through the Temple Island development

The proposed alternative developments on Temple Island will generate business rates income for BCC. Any business rates income would be split with 50% going to BCC and 50% going into the West of England EDF pool.

Based on the current planned floorspace, and the type of developments planned on the site, BCC have estimated that it could expect up to £2.2m per annum to be generated in business rates.

Using the business rates income estimates provided to us by BCC, we have estimated that over the 25 year appraisal period £22.1m in business rates, in NPV terms, could be generated with £11.1m being received by BCC.

These estimates are based upon a high level appraisal of the potential business rates income that could be generated through the alternative development of the Temple Island site. Any changes to the current plans for the site would likely impact the level of business rates that could be expected from the development. Therefore, if the plans for Temple Island progress, this analysis should be revisited when more data and information becomes available.

5.5 Wider impacts associated with the development

We consulted with BCC to understand what, if any, wider impacts might be catalysed through the proposed alternative development of Temple Island.

Due to the early stages of the project and the limited information currently available, BCC have not yet been able to identify the potential scale, type and timings of any catalysed developments driven by the Temple Island site. We have therefore, been unable to assess the potential wider impacts quantitatively. However, in this section we have assessed the wider impacts qualitatively based on information provided to us by BCC.

BCC has stated to KPMG that it considers that the proposed higher density residential and commercial development on Temple Island will have a transformational impact on the perception of the surrounding area, and will generate interest in the area, increasing the likelihood of additional developments coming forward.

In particular, BCC has suggested that the Temple Island development could catalyse further development on the sites surrounding Temple Meads Station. It considers that as the new residential developments on Temple Island will increase the local population living in the area, this will result in increased spending in the local area, in particular with retail businesses such as food stores. This increase in spending would have a knock-on effect, benefitting local businesses and BCC considers that this may result in new businesses being attracted to the area. As the planned retail offering on the

Temple Island site is relatively small, it is BCC's view that further modest retail developments surrounding the Temple Meads station could come forward.

In addition, BCC considers it reasonable to assume that if the demand for office space is greater than the increased supply offered by the Temple Island site development, the surplus demand could "spill-out" to adjacent sites, catalysing further employment space development around Temple Meads and in the wider city centre.

From discussion with BCC, we understand that interest has already been expressed in the redevelopment of adjacent sites based on the expectation of development on the Temple Island site.

As the Temple Island site is currently unused and has been for a number of years, we consider that it is appropriate to conclude that the regeneration of the site in to mixed-use development would likely generate positive spillover effects in the surrounding area.

However, there is considerable uncertainty at this stage about the scale and scope of any catalytic impacts.

It is important to note that the level of potential economic impacts generated through any catalysed developments will be largely dependent on the type and nature of development that is brought forward. Typically, residential developments generate a lower level of economic activity in the long-run when compared to commercial developments. Residential developments will generate temporary GVA through construction and when sold, and some ongoing low-level economic activity associated with the spending of residents. Commercial developments tend to generate more value added for the local economy through businesses direct activities, supply chains and employment on an on-going basis. Higher intensity employment commercial development, such as offices and working spaces for start-ups, tend to generate higher levels of economic activity than other types of developments, such as retail and leisure businesses.

If the proposed alternative development of Temple Island is taken forward, it will be important for the potential economic impact of any catalysed developments to be assessed quantitatively, as and when the required information becomes available.

6 Value for money assessment

6.1 Summary of the economic impacts

In Section 5 above we have assessed, adopting a high level appraisal approach, the potential economic impacts associated with the proposed alternative development of the Temple Island site. The results of our analysis are summarised in Figure 12 below.

Based on the scope of our quantitative analysis, we have estimated that the Temple Island development could generate £935.0m in net GVA (in NPV terms) and 2,101 FTE jobs in the West of England over 25 years.

Figure 12: Net GVA (in NPV terms), employment (in FTEs) and business rate income associated with the proposed alternative development of Temple Island over 25 years

		25 years		
		Net GVA	Net employment	Business rates
West of England	Construction	£59.6m	75	-
	Operation	£875.3m	2,026	£22.1m
	Total	£935.0m	2,101	£22.1m
Bristol	Construction	£56.5m	71	-
	Operation	£861.9m	2,003	£22.1m
	Total	£918.4m	2,074	£22.1m

Source: KPMG analysis

6.2 Value for money assessment of the proposed alternative development of the Temple Island site

Using the estimates of the potential economic impacts that could be generated through the proposed development, we have estimated the associated economic NPV. We have also estimated the BCR associated with the Temple Island development proposals. There are a number of assumptions and caveats linked to this, as detailed below, that should be considered when interpreting the results.

Given that, by nature, construction impacts are temporary and are generated over a short time frame, these impacts are often excluded from the assessment of VfM. Therefore, in our economic NPV and BCR estimates we do not take account of construction related economic impacts.

We note that a VfM assessment extends beyond consideration of the BCR. The financial and commercial cases for the proposals also need to be taken in to account including other aspects of the project, such as affordability, deliverability and the expected level of risk.

For our assessment of the VfM metrics (the NPV and BCR) for the Temple Island developments we have assessed the potential economic benefits of the Temple Island site against the £25.6m of public sector funding that could be made available, if required, for the development (see Section 4 for further details) and the £12.5m of capital receipt from the sale of the land (which represents the opportunity cost of the alternative development). The current estimate of land value are based on a high level assessment undertaken by third party advisors for BCC. A full Red Book evaluation of the potential land value has not been undertaken, therefore the £12.5m should be viewed as an initial estimate and is subject to change. We note that this is a conservative estimate and at the lower end of range of potential values estimates presented by BCC third party advisors.

The results of our analysis are set out in Figure 13 below.

Figure 13: Value for money assessment of the proposed alternative development of the Temple Island site over a 25 year appraisal period

	25 years
Total net GVA (in NPV terms)	£875.3m
Public sector contribution	£38.1m
BCR	23.0: 1
NPV	£837.2m

Source: KPMG analysis

We estimate that the proposed alternative development of the Temple Island site, excluding any construction impacts, could yield:

- a BCR of 23.0:1 over a 25 year period; and
- an economic NPV of £837.2m over a 25 year period.

This assessment also excludes a range of impacts that it was not possible to assess at this stage due to a lack of data and information or as they were outside the scope of our study. Specifically, the analysis does not take account of:

- any wider social impacts that the development may deliver;
- any catalytic impacts that may arise (assessed qualitatively in Section 5.4);
- the potential impacts generated through the sale or letting of residential units developed on the site; and
- any spending related impacts that may arise if a conference centre and hotel is developed that results in increased visitors to Bristol.

These impacts have the potential to increase the VfM of the proposed alternative development of the Temple Island site.

However, the development plans for the Temple Island site are also only in the early stages and there remains delivery risk and uncertainty about the exact development that may come forward and over what timeframe. Additionally, the level of public sector spending that may be required to bring forward the developments is not clear.

Therefore, this analysis is indicative only and we consider that the VfM of the Temple Island site should be reassessed once the plans have progressed further and more data and information is available to conduct a detailed assessment of factors including the level of costs, commercial and financial arrangements and potential economic impacts.

6.3 Comparative assessment of the proposals for an Arena and the alternative developments on the Temple Island site

When making public spending decision it is helpful to consider the relative VfM that could be achieved through alternative schemes. Therefore, we have compared the economic NPV and BCR for the two competing development proposals for the Temple Island site – the Temple Island Arena and the alternative mixed use development.

The same caveats and assumptions associated with the alternative Temple Island development assessment (detailed above) and for the Temple Island Arena (as detailed in our Temple Island Arena VfM report) apply to this comparison.

Figure 14 below sets out the key VfM indicators associated with the two development proposals over a 25 year period.

Figure 14: Comparison of the value for money metrics for the Temple Island Arena and the alternative mixed-use development, over 25 years

	Temple Island Arena	Alternative Temple Island development
Total net GVA (in NPV terms)	£387.1m	£875.3m
Capital costs/ public sector capital contribution	£148.0m	£38.1m
BCR	3.2:1	23.0: 1
NPV	£282.6m	£837.2m

Source: KPMG analysis

The analysis suggests that the economic NPV of the Temple Island Arena project is comparatively lower than the economic NPV of the alternative Temple Island development. This suggests that, based on the evidence currently available to inform the assessment, in cost and economic terms, the alternative Temple Island development proposals present better value for money and would generate higher economic impacts.

However, it should be noted that there is considerable difference in the stage of development of the plans for the propositions and the details on which the assessments are based. In comparison to the alternative development proposals for Temple Island, the Temple Island Arena is a well-developed project and as a result could be considered, at this point in time, to be more deliverable.

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Temple Island Arena: Value for Money Assessment

**KPMG report for Bristol
City Council**

June 2018



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1 About this study

1.1 History of Temple Island Arena project

Bristol is the only UK core city that does not have a major arena¹. In 2013, Bristol City Council (“BCC”) commissioned a study that would assess the feasibility of the construction of an arena in the City². This study found that there was strong support for an arena, as well as:

- a strong market in Bristol for an arena;
- interest from major operators in leasing an arena; and
- a requirement for public sector funding for the project.

BCC purchased a site (the former Diesel Depot site and the Post Office Sorting Depot site) to house the Arena in 2015. The site, named Temple Island, is part of the Bristol Temple Quarter Enterprise Zone (BTQEZ), located close to Bristol Temple Meads train station.

The proposed Arena has been designed to have a 12,000 (10,000 seated) capacity and it is proposed that it will be situated on the Temple Island site. As a result of a procurement exercise the Arena is expected to be rented and operated over a 25 year period by SMG and Live Nation (“the Arena Operator”), who have formed a joint venture specifically for the Temple Island Arena following a BCC led procurement process.

In 2016, after submitting a business case to the West of England Local Enterprise Partnership (“LEP”), BCC was granted £53.0m in funding for the proposed Arena project to be paid over an 18 year period commencing on the opening of the Arena. This is supplemented by £25.9m of investment to develop the Arena from BCC itself.

If the Arena is taken forward as currently planned, initial enabling works are expected to commence in 2018 and construction works will begin in 2019, with the intention of the Arena opening in 2021.

Since the LEP funding was granted, a number of key events have taken place:

- a new contractor for the construction of the Arena, Buckingham Group, has been appointed by BCC;
- a Target cost for the project has now been identified, and the total project cost exceeds the approved budget for the project;
- the University of Bristol has purchased a portion of the Temple Island site and the former Post Office Sorting Depot site in the BTQEZ where a new campus and student residences will be located; and
- YTL Developments Limited (“YTL”), an infrastructure conglomerate, has come forward with a competing proposition to build a privately financed arena in the Brabazon Hangar in Filton, 5 miles from Bristol City Centre, therefore not requiring the same degree of public funding support.

¹ Davis Langdon and IPW... (2013) Bristol Arena Outline Business Case: Final Report November 2013.

² Davis Langdon and IPW... (2013) Bristol Arena Outline Business Case: Final Report November 2013.

1.2 Scope of work

KPMG was commissioned by BCC to undertake a Value for Money (“VfM”) review of the proposed Temple Island Arena. The study is intended to provide an evidence base for BCC to allow it to make future decisions on the investment in line with its duty of best value.

In this context, Value for Money relates to the achievement of both economy and efficiency (i.e. delivering the benefits which were the justification for the investment at the outset and meeting these objectives at a proportionate cost).

Our study covers the following main areas:

- A review of the strategic case for the Arena on the Temple Island site, including:
 - identification of the stated objectives for the Arena;
 - an assessment of the current validity of those objectives and their compatibility with the overall vision and priorities of BCC and the BTQEZ; and
 - a review of the extent to which the objectives warrant the allocation of public funding on both an initial and ongoing basis and the scope for alternative approaches to achieving these objectives on a more efficient and/or effective basis.
- A review and assessment of the strength of the economic case for the Arena on the Temple Island site, based on an appraisal methodology that is consistent with the principles set out in the HM Treasury Green Book. This includes:
 - a review of the estimation of the Gross Value Added (GVA) and employment impacts through the construction and operational phases of the Arena, in direct, indirect and induced terms;
 - a review of the evidence in relation to the wider impacts that could be realised in terms of catalysed development going forward;
 - a review of evidence in relation to any social impacts that could potentially be realised through any commitments given by the Arena Operator and developer; and
 - identification of gaps in the evidence base.
- Commentary on the Benefit Cost Ratio (BCR), including taking account of the full socio-economic impact of the project and the impacts that are not direct or easily valued. A review of the environmental impacts is not included within the scope of KPMG's work.
- A review of the main contractual arrangements and an assessment of the key commercial and contractual risks and opportunities.
- A review and analysis of the projected financial forecasts of the Arena project, including: a review of the identified level and trend of costs, various funding mechanisms, the impact of the project on BCC's revenue and capital account; and consideration of alternative financing options.
- Specification of potential performance indicators that may be used by BCC to better monitor the performance of the Arena development and the achievement of the overarching outputs and outcomes against specified milestones.

Our analysis draws upon data and information provided to us by BCC and other stakeholders, including:

- Buckingham Group Contracting Limited; (“Buckingham” or “BGCL”)
- the Arena Operator;
- the University of Bristol,
- BCC's cost consultants, Aecom;

- the Homes & Communities Agency (HCA)³;
- Destination Bristol; and
- key personnel at BCC involved in the Arena project and the BTQEZ.

Additionally, we sourced data and information from a number of external public sources. This includes official statistics published by the Office for National Statistics (ONS), data from the HCA and existing research, analysis and economic literature from a range of sources.

1.3 Structure of this report

Our report is structured over two documents.

- a) This Report: Provides a commentary of the key findings of our review; and
- b) The Background Document: Contains commercially sensitive information not for publication.

Sections 2, 3, 4 and 5 of this Report highlight our headline findings and recommendations.

We note that subsequent to our initial findings and recommendations, BCC commissioned KPMG to produce assessments of alternative propositions, both for an arena in Filton at the Brabazon Hangar and also an alternative mixed use commercial and residential scheme at Temple Island. Our assessment of those propositions is contained in our reports entitled 'Assessment of alternative plans for an arena in Bristol' and 'Assessment of alternative development plans for the Temple Island site'.

³ The HCA became Homes England in January 2018.

2 Headline findings

KPMG's headline findings are set out below. Section 4 sets out these points in further detail.

- **We estimate the Project has a positive BCR, although lower than the 2016 estimate:** Over a 25 year period there is an estimated BCR of 3.2:1. This suggests a strong economic case for the Arena at Temple Island.
- **We estimate the Arena could yield net additional economic output and employment:** In net terms, the direct, indirect and induced impact of the operation of the Arena, wider spending of attendees and catalytic development could generate Net Present Value (NPV) GVA of approximately £387.1m and up to 660 Full Time Equivalent (FTE) jobs in the West of England over 25 years.
- **We note that positive social impacts may also arise from enhancing Bristol's cultural offer:** The Arena will fill an existing gap in Bristol's cultural offering, and would regenerate a currently derelict site in Bristol. The Arena could have widespread benefits in terms of improving the standard of living in Bristol, improving access to culture and arts and improving community cohesion. Social impacts are also linked to the developer's Employment and Skills Plan⁴ (targets to be finalised) and any community engagement activities the Arena Operator chooses to put in place⁵.
- **We note the strategic case has weakened since the Outline and Full Business Cases were drafted:** Since the Full Business Case ("FBC") for the Arena was put forward, BCC has further developed its strategic plans for the City and BTQEZ, and wider public priorities have changed. Furthermore, the University of Bristol's purchase of the remainder of the Temple Island site and the Post Office Sorting Depot site has weakened the likely catalytic impacts of the Arena and, therefore, the strategic case of the project. The strategic rationale for public sector intervention would also be weakened if YTL's private sector led and financed proposition for an arena proves deliverable and would generate a similar or better BCR.
- **We note that the projected development cost exceeds BCC approved budget:** BCC has received a Target Cost estimate from Buckingham of £122.1m that, once added to BCC's own costs of £34.2m⁶, give a total estimated cost (excluding land contribution and car parking) to develop the Arena of £156.3m, exceeding the approved budget of £123.5m⁷ by £32.8m. Buckingham has been appointed following a two stage tender process, meaning the actual cost may differ from the Target Cost as subcontractor packages are agreed. The risk of actual cost differing from Target Cost is shared between BCC and Buckingham, although BCC has made prudent contingency allowances for BCC risk that follows professional advice. The risk sharing mechanism is described further in the Background document.
- **We note that significant public funding support is needed to deliver the Arena:** The total development cost of the Arena is estimated at £188.6m, comprising the £156.3m set out above, £16.2m to develop the required car parking facilities for the Arena, a valuation of the land contributed of £12.5m and interest during construction of £3.6m. This will be met by BCC funding contributions of £38.4m (including the land contributed) and net operating cash flow during construction of £5.2m with the remaining £145.0m met through borrowing from the Public Works Loan Board ("PWLb"). The LEP will meet the costs of interest and repayment of £53.0m of the

⁴ Buckingham Group Contracting Limited (2017) Employment and Skills Plan (ESP) for Bristol Arena.(revised March 2018)

⁵ We note that there are no contractual obligations on the Arena Operator, at present, to deliver such activities.

⁶ BCC costs include client side, project management costs, and risk contingencies. These are costs are set out in further detail in the confidential Background Document.

⁷ Previous BCC budgets for the Arena did not take account of anticipated car parking costs

PWLB loans (£65.6m over an 18 year period⁸) with interest and repayment of the remaining £92.0m met from net income from the Arena and car parks. After taking into account the BCC and LEP funding contributions that do not require repayment, the Arena will make a positive financial return, before financing costs, of 2.82% nominal over 25 years in nominal terms.

- This level of nominal financial return is lower than our estimate of what a commercial investor would require for an investment of this risk (KPMG use a proxy estimate of 6.20%) and below the HM Treasury Green Book threshold for public sector investment appraisal of 5.57% (3.50% real rate adjusted for BCC's 2.00% inflation assumption). Before any public sector funding contributions the Arena is estimated to deliver a financial return of -0.67% over 25 years. This willingness to invest at a sub-commercial return represents direct financial support. KPMG calculate the value of this support in NPV terms as £36.9m using HM Treasury Green Book rates and £42.1m using KPMG's estimate of a project specific rate of return⁹ of 6.2%.

Figure 1: Estimate of public funding support

£m	Total (nominal)	NPV (Project)	NPV (HMT)
LEP funding support	65.6	29.7	32.0
BCC contributions	38.4	31.3	31.9
Total direct funding support	104.0	61.0	63.9
Value of sub-market investment return		42.1	36.9
Total value of public financial support		103.1	100.8

Source: BCC, KPMG analysis

- We note that arenas in the UK typically require public subsidy and are not independently profitable at commercial rates of return.
- **We note there is no ongoing revenue cost for the Council:** The financial return from the Arena of 2.82% over 25 years, after taking into account the committed LEP funding of £53.0m¹⁰ and £38.4m of earmarked BCC capital and land contributions, is marginally more than BCC's assumed long term cost of borrowing under PWLB of 2.80%. This means that the annual operating surpluses from the Arena can meet the cost of the interest and repayment of PWLB debt over 25 years, generating an additional operating surplus of £1.3m in nominal terms over 25 years under current forecasts. With appropriate profiling of debt repayments, there is no ongoing revenue cost for the Council¹¹. We note there is very little contingency, margin or profit for BCC. Should gilt rates increase prior to executing the PWLB debt, or additional BCC costs be incurred, an operating deficit could arise.
- **We conclude that key risks are backed off to subcontractors but risk for BCC remains:** The contractual structure backs off key construction and operating risks to subcontractors, mitigating the Council's risk. In our view the key commercial risks to BCC are as follows:
 - **Design risk:** We note that the Buckingham Target Cost estimate follows a value engineering exercise to reduce construction cost. This has led to design changes meaning that there is currently no detailed design that matches the revised Buckingham offer. This suggests a greater degree of risk in the Target Cost number than we would ordinarily anticipate at this stage of a project.
 - **Income and operating risk post year 25:** The Arena will be leased to Arena Island Limited ('AIL'), a joint venture between SMG Europe Holdings Ltd and Live Nation UK Ltd for 25 years

⁸ The £65.6m LEP contribution comprises funding support of £53.0m plus meeting £12.6m of interest costs due to the contribution being provided over an 18 year period.

⁹ Further detail on the basis for the KPMG estimate of project specific rate of return is contained within the Background Document.

¹⁰ LEP funding comprised of £53m in agreed funding, plus associated interest costs associated with PWLB loans, estimated at £12.6m per BCC financial forecasts. Total assumed funding is therefore £65.6m

¹¹ We note that in the financial model that BCC provided to KPMG, the repayment profile of the PWLB loan is shown such that there is a small funding shortfall in years 1-14 and 20-25 of the Arena's operation. Our conclusion is based on the fact that this doesn't have to be the case, if PWLB repayments are sculpted around the receipt of cash from the LEP and Arena Operator. The actual repayment profile of PWLB loans should be considered as part of BCC's overall treasury management strategy and not on a stand-alone project basis.

post completion, with AIL taking the risk of income, operating and maintaining the Arena for that period. £59.5m of PWLB debt (net of MRP reserves) is estimated to still be outstanding at the end of the AIL contract, which would either need to be repaid through sale of the Arena or ongoing income from that point. BCC's estimate of market value of the asset at year 26 is 111% of the debt outstanding. These levels of loan to value are high compared to KPMG's estimate of what a commercial investor would require and given the high level of uncertainty of forecasting 25 years into the future. The future valuation of the Arena is calculated based on the present value of future net income from the asset. This is a reasonable approach, but we note that a valuation of the Arena in 25 years is highly sensitive to changes in operating assumptions over that period.

- **Counterparty risk:** The passing of financial risk to Buckingham Group and AIL rely on the credit standing of those counterparties relative to their obligations. We have reviewed the financial positions of both parties in the Background Document based on information available from the latest published annual accounts.
 - Buckingham is a medium sized UK based contractor, with over £400m in turnover, £62.5m of cash and limited borrowing based on its 2016 audited accounts. This is a reasonable balance sheet position for a company of this size. We understand from BCC that Buckingham continued to grow in 2017, with its audited figures for 2017, due to be released shortly, expected to show increases in both its revenues, profit before tax and cash position. Given the challenges in the UK construction market, the role of the BCC project team in monitoring construction performance and spend takes greater importance.
 - AIL is a joint venture between SMG and Live Nation. SMG and Live Nation are two market leading companies in the live entertainment industry, with Live Nation being listed on the NYSE and having a Moody's credit rating of Ba3. Whilst this is not investment grade, overall we consider the risks associated with the operator income as being low or at least mitigated to the extent reasonably deliverable.
- **We note Aecom's work that concludes that BCC has taken a reasonable approach to assessing the construction cost and risk of the project, albeit the nature of the contract with a pain gain share mechanism means there is still the potential for cost overruns:** Aecom's view is that the build can be achieved within the Target Cost envelope of £122.1m, recommending a further client side contingency of £4-5m to cover any BCC risks under the contract. BCC has provided additional contingency beyond the recommended Aecom level, suggesting a degree of prudence. BCC's maximum potential exposure under the pain/gain share mechanism is £9.15m.
- **We conclude that the link to wider City vision could be further developed to strengthen the case for the Arena and its proposed location:** Looking at the benefits of any major infrastructure or public sector capital project in isolation has limitations, as the economic and social strength of a place relies as much on how different projects complement and reinforce each other as part of an overall vision and plan providing a package of public interventions towards an overall aim. In this case, the Arena's role as part of a wider City Plan and vision for development could be strengthened.

3 Financial Overview

We set out in Figure 2 below the Arena project cash flow, as per BCC's financial projections for the Arena and associated car parking requirements.

Figure 2: BCC Project cash flow statement¹²

£m	Total	Construct	Operations					Residual value debt repayment
		ion	Years 1-5	Years 6-10	Years 11-15	Years 16-20	Years 21-25	
Operating cash flows								
Operating rent and car parking income*	90.8	-	14.7	16.2	18.0	19.9	22.0	0.0
Asset value at year 25	66.0	-	-	-	-	-		66.0
Total operating cash flows	156.8	0.0	14.7	16.2	18.0	19.9	22.0	66.0
Project capital expenditure								
Arena capital expenditure**	(167.3)	(167.3)	-	-	-	-	-	-
Project cash flows	(10.5)	(167.3)	14.7	16.2	18.0	19.9	22.0	66.0
Revenue and capital contributions								
LEP funding	65.6	-	20.7	18.8	16.9	9.2	0	-
Project cash flows after LEP contribution	55.1	(167.3)	35.4	35.0	34.9	29.1	22.0	66.0
Total BCC capital contributions	25.9	25.9	0.0	0.0	0.0	0.0	0.0	0.0
Pre PWLB financing cash flows	81.0	(141.4)	35.4	35.0	34.9	29.1	22.0	66.0
Financing								
PWLB interest expense	(85.3)	(3.6)	(19.8)	(18.1)	(16.3)	(14.4)	(13.2)	-
Interest income	5.6	-	0.1	0.5	1.1	1.7	2.2	-
Net interest expense	(79.7)	(3.6)	(19.7)	(17.5)	(15.2)	(12.7)	(11.0)	-
Net PWLB debt drawdown	145.0	145.0	0.0	0.0	0.0	0.0	0.0	0.0
PWLB debt repayment over years 1-25	(55.8)	-	(12.1)	(12.7)	(13.4)	(10.9)	(6.8)	-
Residual value repayment	(89.2)	-	-	-	-	-		-89.2
Total debt drawdown and repayment	-	145.0	(12.1)	(12.7)	(13.4)	(10.9)	(6.8)	(89.2)
Transfers (to)/from MRP reserve	-	-	(4.4)	(5.1)	(5.8)	(6.7)	(7.7)	29.7
Surplus / (deficit)	1.3	-	(0.8)	(0.3)	0.5	(1.1)	(3.5)	6.5

*Includes arena and car parking income, and operating costs

** Includes car parking, contingencies, arena build cost, net operating cash flow during construction and BCC internal costs

Source: BCC cash flow forecast - 18th May 2018

The project cash flows from the Arena and associated car parking generate a loss of £10.5m. Once the income over an 18 year period from the LEP of £65.6m is taken into account the project generates a surplus of £55.1m. This represents the return to BCC.

After BCC's own capital contributions of £38.4m, including land of £12.5m and the borrowing costs associated with the PWLB lending are factored in the Arena delivers a small nominal terms surplus of £1.3m in BCC's own financial projections. BCC's projections show a small cash deficit from years 1-9

¹² Cash flows excludes the land contribution of £12.5m as this is not a cash item

and 19 to 24. However, if debt repayments are sculpted more closely to cash generated it is possible for the Arena to generate a small cash surplus in every year and meet debt repayments.

Figure 3: Sources and Uses of funds during construction

Sources	£m	Uses	£m
Capital Funding	15.9	Buckingham Target Cost	122.1
Transport Contribution	1.8	BCC Costs ¹³	50.4
CIL	8.0	Interest During Construction	3.6
Net operating cash flow during construction period	5.2	Temple Island Value	12.5
BCC Revenue Contribution	0.3		
Land Contributed	12.5		
Borrowing			
PWLB	145.0		
Total	188.6		188.6

Source: BCC financial projects 18th May 2018; KPMG analysis

We note that after BCC contributions of £25.9m and the land contribution valued at £12.5m the Arena delivers a return marginally above BCC's assumed borrowing costs of 2.80%.

Figure 4: Arena returns

	Nominal IRR	Nominal IRR (excl. sunk costs)
Project cash flows before public contributions	-0.67%	-0.33%
Project cash flows including LEP contribution	1.28%	1.74%
Project cash flows including LEP and BCC capital contributions	2.82%	3.50%

Source: BCC financial projections 18th May 2018; KPMG analysis

¹³ BCC Costs include carparking construction, risk contingencies and client side costs. These costs are set out in further detail in the Background Document.

4 Value for Money overview

4.1 Review of the strategic case

4.1.1 Summary of the stated objectives of the Arena

As a public-sector led and funded project, the Arena needs to be considered in the context of the wider public priorities, and whether the Arena is the best use of public money in terms of delivering public benefit.

As part of our review, we considered BCC's stated objectives for the Arena and their current validity and compatibility with the overall vision and priorities of BCC and the BTQEZ.

A vision for the Arena project was set out in the 2012 feasibility study¹⁴ and restated in the Outline Business Case (OBC) for the Arena, dated November 2013¹⁵:

"The delivery of an arena for Bristol on the Temple Quarter site, acting as a major catalyst and economic driver for the new Enterprise Zone. The Arena should be commercially driven, delivered quickly and on budget, and be sustainable at no on-going revenue cost to the Council and its partners."

This OBC also detailed key objectives for the project, stating that these were the factors against which success of the project would be determined. The objectives were expressed in relation to two aspects of the Arena; the experience and the building. The objectives broadly set out the desired public perception, capacity and functionality of the Temple Island Arena.

The FBC¹⁶, submitted to the West of England LEP in April 2016, also largely re-stated these objectives, with some minor changes in relation to the functionality of the Arena and the surrounding infrastructure, such as parking.

4.1.2 Summary assessment of the existing strategic case for the Arena and current validity of the stated objectives

Since the FBC for the Arena was put forward in 2016, BCC has further developed its strategic plans for the City and BTQEZ and wider public priorities have changed, partly in light of budgetary constraints. For example, housing, social and economic equality and social care are key priorities identified by BCC in its Corporate Strategy¹⁷ which, largely, the Arena project will not address¹⁸. However, we note that the Arena could contribute towards BCC's commitment to *"keep Bristol a leading cultural city, helping make culture, sport and play accessible to all"*¹⁹.

For the purposes of our assessment KPMG considered the strategic case put forward in the 2016 FBC, as this is the most recent version of the strategic case and therefore the most relevant for consideration as part of our review. The stated objectives have been set out and assessed in the Background document.

¹⁴ Davis Langdon, An AECOM Company and IPW... (2012) Bristol Arena Stage 1 Feasibility Report.

¹⁵ Davis Langdon, An AECOM Company and IPW... (2013) Bristol Arena Outline Business Case: Final Report November 2012.

¹⁶ Bristol City Council (2016) Bristol Arena Full Business Case.

¹⁷ Bristol City Council (2017) Corporate Strategy 2018-2023. Draft for consultation, November 2017.

¹⁸ The economic and social impacts associated with the Arena are assessed as part of our VfM review, although impacts on inequality have not been previously assessed, therefore do not form part of our assessment.

¹⁹ Bristol City Council (2017) Corporate Strategy 2018-2023.

The key ways in which the strategic case for the Arena has changed since the FBC and the key factors affecting the validity of the stated objectives are:

- **There is likely to be less potential for the Arena to catalyse the BTQEZ going forward:** The stakeholders at BCC and Destination Bristol consulted during the course of our review suggested that plans to locate the Arena on the Temple Island site may have already helped to catalyse development in the BTQEZ, by giving developers the confidence to invest in the zone. The wider catalytic impact of the Arena going forward may be more limited as other developments such as the University of Bristol campus and the Temple Meads Station re-development are likely to have a greater influence in attracting businesses to the BTQEZ than the Arena. Reduced availability of sites adjacent to the Arena was also considered to limit the scope for additional new development in the immediate vicinity.
- **The Arena could benefit the local communities and deliver ongoing social benefits, depending on the level of the Operator's engagement with the local community:** Although the Arena will be a publicly owned asset, it will be operated privately. The degree to which public benefits arise will depend on the Arena Operator. At present, the Arena Operator has put forward examples of community engagement activities it has delivered at other arenas but we have seen no formal plans presented for community programmes in Bristol and there are no contractual obligations on the operator to provide these²⁰.

The Arena will deliver employment opportunities in Bristol through both the construction and operational phases. The contractor, Buckingham, has contractually committed to use local labour, including delivering apprenticeships and engaging with local education establishments²¹. The Arena Operator has stated that it aims to recruit 20% of its workforce from the local area²². This increased employment and economic activity is likely to benefit the City as a whole.

Furthermore, during our consultation with stakeholders it was noted that the Arena could improve access to the south of Bristol, through wider infrastructure associated with the Arena such as the Southern Access footpath and cycle link. We have been told by BCC that these areas directly south of the Temple Island site are relatively deprived and therefore improved access to the City centre, key economic zones and transport facilities may improve quality of life for the residents in these areas.

- **Although the Arena could contribute toward the growth and future development of the LEP priority economic sectors²³, its impact may be limited:** The Arena will fill a gap in Bristol's cultural infrastructure. The UK Government Culture White Paper suggests that culture can be an important factor in the level of quality of life within an area. Section 4.4.4 summarises the social benefits that may arise from the Arena. Destination Bristol noted to KPMG as part of the stakeholder engagement that the Arena could increase the attractiveness of the BTQEZ as a potential location for firms, especially those in the creative and digital media sectors. However, it is unlikely that the Arena alone will be a key factor in a firm's location decision.

The Background Document sets out in greater detail our review and assessment of the existing strategic case for the Arena as presented in the FBC.

4.1.3 Summary assessment of the case for public intervention

In reviewing the strategic case for the Arena, it is important to assess the rationale for public intervention and how the validity of this rationale may have changed over time. This includes examining what the market failure may be and/or any externalities that may be present in the market.

²⁰ We understand from BCC that when tendering for an Arena Operator and agreeing contractual terms a decision was made not to place contractual obligations on an operator to provide community engagement activities but instead to maximise operator rental income.

²¹ In Buckingham Group Contracting (2017) Quality Commitment Question No.2 Employment and Training, Buckingham has committed to "aim to have" 75% of its workforce from the West of England, with 50% from Bristol.

²² As set out in the Draft Local Impact report compiled by Arena Island Ltd. and shared with KPMG by BCC.

²³ The priority sectors are: advanced engineering and aerospace; creative and digital; high-tech; low carbon and professional services.

In the case of the Temple Island Arena, the strategic rationale for public sector investment in the scheme, as set out in the 2016 FBC, is centred on three main points:

1. It is rare for arena projects to be brought forward by the private sector;
2. The benefits gained from the Arena will mostly be public benefits and as a result, the project is not seen as commercially viable for private investors; and
3. The Arena is expected to act as a catalyst for the development of the wider area. The Temple Island site, on which the Arena is proposed to be located, is a derelict brownfield site which has been vacant for over 15 years with little to no private interest. Therefore, there is evidence that the private sector has not been forthcoming in delivering any developments on the site.

There is some evidence to suggest that arena projects are generally not brought forward by the private sector. Of the three most recent arena projects²⁴ in the UK, only one has been primarily private sector led, although it should be noted that this project was the refurbishment of the Sheffield Motorpoint Arena, which was a comparably much smaller project than that of the Temple Island Arena project. In all other cases, the projects have been championed and majority funded by the public sector and there are examples of where private sector proposals have not proceeded (e.g. the Leeds Arena).

We note that investment by the public sector in cultural assets, such as arenas, often reflects the wider benefits (positive externalities) that can be realised. These are benefits to the wider economy and society beyond those that would be realised by private developers. Where the social returns are higher than the private returns this can provide a further rationale for public sector intervention. These economic and social impacts are assessed in Section 4.4.

In the case of Temple Island Arena, we note that no private investor had previously come forward with proposals for funding the development of an arena on the Temple Island site. The development of the Arena would involve high levels of upfront investment. This is unlikely to be attractive to most private sector organisations or be regarded as commercially viable given the level of risk and returns from the project.

The Temple Island site is a derelict brownfield site, requiring remediation. Planned developments on the site and surrounding area, such as the University of Bristol development and some developments in the Enterprise Zone, have been backed by public sector funding. However, given the well-connected location of the Temple Island site within the BTQEZ and its proximity to Temple Meads Station, the site may become increasingly attractive to private investors in the future as other developments progress. Some element of public sector intervention may still be required, however. The potential alternative use of the Temple Island site, and the extent to which it may require public intervention is reviewed in our report, Assessment of alternative development plans for the Temple Island site.

Since the FBC was submitted, a private sector led proposition for an arena in Bristol has been brought forward by YTL. Its proposition is for an arena to be developed by YTL in the Brabazon Hangar in Filton, Bristol. If deliverable and shown to deliver a similar BCR, this private sector led proposition weakens the strategic rationale for public sector intervention of the proposed Arena project on Temple Island site.

4.2 Review of the commercial case

KPMG has reviewed the commercial structure of the Project and the arrangements in place with Buckingham Group Contracting Limited to construct the facility and Arena Island Limited ('AIL'), a joint venture between SMG Europe Holdings Ltd and Live Nation UK Ltd, who will operate the Arena for an initial period of 25 years.

²⁴ Includes Leeds Arena in 2013, SSE Hydro Arena in Glasgow in 2013 and the refurbishment of Sheffield Motorpoint Arena in 2010.

We set out below the key considerations from BCC arising from our review of the commercial structure:

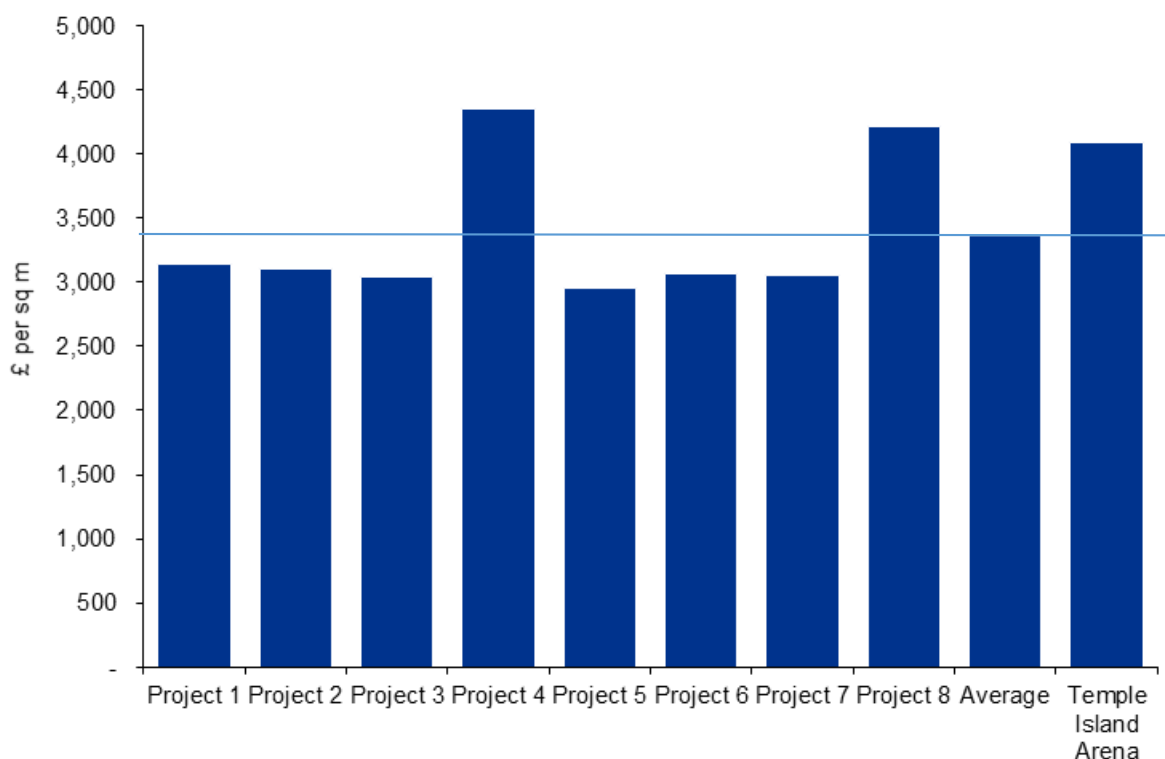
4.2.1 Construction phase

Target Cost exceeds BCC approved budget due, in part, to the BCC specification for the Arena- Buckingham's latest Target Cost Offer is in line with Aecom's July 2017 cost estimate.

However, the Target Cost, when combined with BCC's own costs and contingencies, gives a total of £156.3m, £32.8m greater than the approved budget of £123.5m, albeit we note that the approved budget does not include associated car parking costs nor considered the car parking income that pays for the debt service associated with the car parks over time.

We note that Aecom's report to BCC benchmarked the cost of delivering the Bristol Arena against other recently development arenas in the UK and found that the Bristol Arena was in the top quartile on a £/ sq m basis, at c.£4,087/ sq m, 21.4% more than the UK average. This is driven by variety of reasons including site specific constraints due to location, the high quality specification for the design of the building, which was procured by a design competition, reflecting the desire, as stated in the FBC, for Bristol to have an "iconic" arena and tender apathy amongst local contractors due to ongoing public debate around the Arena, suggesting lower levels of competition and hence lower value for money.

Figure 5: Aecom Temple Island Arena cost benchmarking on a £/ sq m basis



Source: Aecom

Reasonable approach to cost estimate – BCC has elected to use a Target Cost setting approach with its chosen contractor, Buckingham. A feature of this approach is that any savings or overruns against the Target Cost are split between Buckingham and BCC, known as the pain gain share mechanism, which is set out in further detail in the Background Document to this report. As a result

there is the potential for the construction cost to exceed the agreed Target Cost. There is also a risk of overruns relating to elements of the project where the risk is retained by BCC.

Aecom has recommended a contingency of £4m - £5m. BCC has gone further than this in its assumptions, as set out in detail in the Background Document, indicating that it has been prudent in its projections. Aecom's view is that the Arena can be delivered within the Target Cost envelope, noting that the Target Cost "has been substantially market tested and once the project regains traction further buying gains are expected from the supply chain"²⁵.

Detailed design is still in development: Due to their initial bid being significantly over budget, Buckingham has undertaken a value engineering exercise on the design to bring construction cost down closer to the initial budget and within Aecom's cost estimate. This has culminated in the current Target Cost.

This value engineering exercise has led to design changes that have not been fully developed. Specifically, Aecom note in their Tender Report that there is "*currently no design that matches the revised BGCL offer and the pain share risk remains due to the NEC Option C Contract*". For further detail, please refer to the Aecom report.

The design of the Arena will be of critical concern to the operator, with Aecom noting that whilst the suggested design changes will not fundamentally change the operator position or business model, further consultation is needed with them.

Financial strength of Buckingham: We have performed a high level assessment of the financial strength of Buckingham based on publically available information.

Buckingham is a medium sized UK based contractor, with over £400m in turnover, £62.5m of cash and limited borrowing (£2m) as at the time of their last published accounts (31 December 2016). We understand that their accounts for 2017 are expected to show the company grew further in the year, with increases in revenue, profit and available cash. The company is targeting £500m of revenues in 2018, and its annual report identifies specific expertise in sports, leisure and civic building development.

We recommend that BCC project team work closely with Buckingham throughout the construction process to monitor construction performance. It should be noted that BCC's own review of Buckingham's financial strength identified it as a low risk.

4.2.2 Operating phase

Operating income risk over the Arena's useful life: Operator income is underpinned by an index linked contract backed by AIL over the first 25 years of operation, insulating BCC from performance risk on the operation of the venue over that period. Income is also received from car parking provision built as part of the Arena development, based on analysis completed by third part consultants CH2M. Post year 25, BCC has a number of options with regard to the Arena building, including agreeing a new operator agreement, managing in house or selling the Arena. Whilst the income in the first 25 years of the project is considered to have limited risk, the cash flows for the remaining 25 years of the forecast asset's life are subject to greater uncertainty. Asking an operator to take risk now for a period beyond this time is unlikely to generate a value for money offer.

BCC project £59.5m of net PWLB debt relating to the Arena still outstanding at the end of the AIL contract. BCC has estimated a market value of the Arena £66.0m at year 25 in its financial forecasts, which it uses to pay down the outstanding net PWLB debt balance at that point of £59.5m as well as the overdraft that has accrued to that point. BCC's figure of £66.0m is based on expected future rental yields, assuming that rental income will grow from year 26 onwards for the remainder of the Arena's useful economic life of 50 years, allowing for a high level life cycle allowance of £10.0m. Whilst these

²⁵ Aecom Bristol Arena PCSA Target Cost Tender Report v0.3

appear reasonable assumptions, there is inherently a high degree of risk associated with any asset valuation in 25 years' time. As such, we consider that the valuation of £66.0m being just 111% of the debt outstanding at the time is significantly higher risk than a commercial investor would take.

BCC could also elect to retain the Arena post the AIL contract and either operate itself or enter into a new operator agreement. Based on the estimated annual rental income implicit within BCC's market value estimate the net cash inflows are also 111% of debt service required to repay the net PWLB £59.5m over years 26 to 50. Again we consider this taking more risk than a commercial investor would take.

Understandably BCC has not made a decision regarding its strategy for monetising the Arena from year 26-50, however we note that under either scenario, rental or sale, the Arena can fully repay the financing required to develop it over its useful economic life although the levels of contingency in these estimates for year 26 to 50 are low.

We also note that BCC has not assumed a capital value for the car parking assets associated with the Arena at year 25 given the uncertainty of predicting long term car parking income streams and ongoing changes to transport and mobility options for Arena attendees.

Operator financial strength: The Background Document overviews the risk associated with the Operator Agreement. SMG and Live Nation are two market leading companies in the live entertainment industry. Overall we consider the risks associated with the operator income as being low or at least mitigated to the extent reasonably deliverable in the market.

Overall, our review suggests that BCC has a credible offer from Buckingham to build the Arena, and limited financial risk over the first 25 years of its operating period. There is cost exposure under the construction agreement to a degree of construction overruns above the current Target Cost.

4.3 Review of the financial case

4.3.1 Funding and financing strategy

The estimated capital cost of the project is met through a combination of £25.9m of BCC funding contribution and PWLB finance entered into by BCC, in addition to the contribution of the land at Temple Island.

Figure 6: Sources and Uses during construction

Sources		Uses	
Capital Funding	15.9	Buckingham Target Cost	122.1
Transport Contribution	1.8	BCC Costs ²⁶	50.4
CIL	8.0	Interest During Construction	3.6
Net operating cash flow during construction	5.2	Temple Island Value	12.5
BCC Revenue Contribution	0.3 ²⁷		
Temple Island Land Contributed	12.5		
Borrowing			
PWLB	145.0		
Total	188.6		188.6

Source: BCC financial projections, 18th May 2018; KPMG analysis

²⁶ BCC Costs include carparking construction, risk contingencies and client side costs. These costs are set out in further detail in the Background Document.

²⁷ Totals may not appear to sum correctly due to rounding.

£53.0m of the PWLB borrowing will be repaid through secure contributions from the LEP, provided over 18 years, who will also meet the cost of interest on the PWLB loans associated with this amount bringing the total LEP revenue contributions to £65.6m (£53.0m capital, £12.6m interest payments). Combined with the £25.9m of BCC capital contribution, and land contribution of £12.5m, this results in £104m of public funding in total. The remaining PWLB borrowing will be repaid through a combination of income received from the Operator over years 1 to 25 of operation, car parking income and the market value of the Arena post year 25.

BCC is also contributing the land at Temple Island, valued by third party advisors at £12.5m based on alternative use for commercial and residential development, representing the opportunity cost to BCC of this land. If the Arena does not proceed as planned at Temple Island, both the land and the capital contributions could be used to fund other priorities as deemed appropriate by BCC.

4.3.2 Net present value of financial cash flows

Measuring the total BCC investment on a nominal basis does not reflect the true cost of that investment as it ignores the time value of money. We have performed a range of NPV calculations in relation to the direct financial cash flows to BCC from the project to assess the value for money case, before considerations of wider social and economic benefits. In doing so, we have assessed three scenarios:

1. The NPV of direct project cash flows and land opportunity cost only over 25 years before any BCC or wider public sector funding sources and before financing provided by BCC. The project cash flows comprise the cost of developing the Arena plus the net operating income that comes directly from the Arena. This represents the value of the direct financial cash flows to public sector as a whole.
2. The NPV of BCC cash flows and land opportunity cost after LEP contribution. This represents the NPV of BCC cash flows, noting that other public sector organisations (i.e. the LEP) will be bearing some of the project costs.
3. The NPV of BCC cash flows after capital contributions – This includes LEP funding and £38.4m of BCC capital contributions (including the land for the Arena), but before PWLB financing costs. This represents the value of any net cash surpluses, noting that BCC has already made commitments to some of the capital funding.

We calculate this NPV using three different discount rates, each which measure something different.

- a) Using the long term cost of borrowing under PWLB. This provides a measure of the affordability of the scheme given BCC has access to long term borrowing at a rate of 2.80%²⁸.
- b) Using a project specific rate of 6.20%, being a proxy of the market rate that we consider applicable to an investment of this risk profile. This is a better measure of the underlying value or subsidy provided to the project once the risk level of the project is taken into account.
- c) Using the rate suggested by the HM Treasury Green book of 3.5% real, which equates to a nominal rate of 5.57% given the 2% inflation assumption made by BCC.

We illustrate the return (IRR) at each level of cash flow in Figure 7 below.

²⁸ 2.8% being an approximation of current long term gilt rates plus 0.8% available under the concessionary rate of PWLB. In reality, gilt rates move on a day to day basis.

Figure 7: NPV summary – BCC base case

NPV of project cash flows (base case)	Project IRR	PWLB (£m)	Project (£m)	HM Treasury Green Book (£m)
Direct Project cash flows	-0.67%	(79.5)	(103.1)	(100.8)
BCC cash flows (after LEP contribution)	1.28%	(34.4)	(73.4)	(68.8)
BCC cash flows after capital contributions	2.82%	0.4	(42.1)	(36.9)

Source: BCC financial projections 18th May 2018; KPMG analysis

After taking into account the LEP and BCC capital and land contributions but before the cost of PWLB finance is taken into account, the Arena generates an investment return of 2.82%. This is slightly higher than the current long term cost of PWLB borrowing (assumed at 2.80%), resulting in the Arena generating a nominal cash surplus for BCC over the 25 year period. The positive net operating surplus suggests that BCC could sculpt the repayment profile of its PWLB loans associated with the Arena to match income received from it and therefore require no annual revenue support in any year of operation, in the base case. In practice the Arena is one of many financing requirements for BCC, with borrowing considered as part of a broader treasury management and debt strategy based on the prevailing market conditions at the time.

Of the capital costs outlined in the report, £12.2m of the costs have already been incurred (including design fees, professional advice and project team costs), per the BCC financial summary (this excludes the land purchase, fully funded by the HCA grant). If BCC takes the decision not to proceed with the Arena, these costs will not be recovered. Whilst an appraisal of the affordability and value for money of the scheme as a whole is useful and an appropriate measure of whether the project should have been undertaken, when considering the decision on whether to proceed from this point forward or not, these sunk costs should be excluded and only costs impacted by the decision considered. We re-state the NPVs below, excluding these sunk costs.

Figure 8: NPV summary – BCC base case (excluding sunk costs)²⁹

NPV of project cash flows (excl. sunk costs)	Project IRR	PWLB (£m)	Project (£m)	HMT Green Book (£m)
Direct Project cash flows	-0.33%	(67.3)	(90.9)	(88.6)
BCC cash flows (after LEP contribution)	1.74%	(22.2)	(61.2)	(56.6)
BCC cash flows after capital contributions	3.50%	12.6	(29.9)	(24.7)

Source: BCC financial projections 18th May 2018; KPMG analysis

We set out in the Background Document the key cash and NPV metrics of the key commercial risks identified in the commercial review.

In summary:

- The project has the potential to deliver annual surpluses in every year of operation, with income exceeding debt service costs, with no revenue funding cost in any year.
- To a large extent this surplus is facilitated by capital contributions from BCC (£25.9m during the construction period) and funding support from the LEP (£65.6m over 18 years).
- The Arena is expected to generate a return before public funding contributions or financing of - 0.67%. After public funding contributions this increases to 2.82%. This is materially lower than our

²⁹ We note that BCC finance team is conducting further work to assess the appropriate treatment of the sunk costs, in the event the Arena did not proceed at Temple Island, in respect of the level of spend set against capital and revenue allowances.

estimate of a market return for an investment of this risk profile demonstrating that the Arena is not a commercially viable proposition without public support.

4.4 Review of the economic case

4.4.1 Summary of KPMG's review of the 2016 economic case for the Arena

In 2013 BCC commissioned AMION Consulting ("AMION") to undertake an interim study to assess the potential economic impact of the proposed Arena, in terms of capital expenditure, GVA, employment and key fiscal impacts associated with any uplift in business rates. This was updated in 2016 for the FBC. As part of the scope of this report we have reviewed the economic case for the Arena on the Temple Island site as presented by AMION.

The AMION 2016 economic assessment, analysed the direct impact of the Arena in terms of:

1. the Arena itself;
2. the wider Temple Island site; and
3. adjacent sites in the BTQEZ where development may be catalysed as a result of the Arena.

In addition, the AMION report also considered the indirect impact that the Arena would have on Bristol and the wider South West region in terms of the wider supply chain and visitor expenditure.

Over a 25 year appraisal period, AMION estimated that the Arena, and wider developments it would catalyse, would deliver a net GVA impact of £729.6m against £94.8m of capital costs, with an impact, in NPV³⁰ terms, of £634.8m and a BCR of 7.7:1.

It should be noted that the assessment of the BCR above does not take full account of the additionality of the project. Specifically it does not factor in the deadweight of the project, i.e. what would happen if the Temple Island Arena is not brought forward on the Temple Island site. When factoring in an alternative development scenario for the Temple Island site if the Arena was not to proceed (the reference case)³¹ AMION's estimated BCR fell to 3.4:1.

As part of KPMG's review of the existing economic case for the Arena, we considered the relevance of the assumptions underpinning the AMION analysis, the data inputs and the overall methodology adopted by AMION. We specifically identified a number of areas in which developments affecting the Arena proposal itself, the Temple Island site and wider BTQEZ as well as external data, affect the outputs assumed in the AMION economic assessment and hence economic impacts. In particular:

- **Arena development costs:** The estimated costs of the Arena development have increased and the Operator position refined, impacting any value for money metrics.
- **Wider Temple Island site:** The University of Bristol has purchased 19,158 sq m of the Temple Island site (i.e. the remaining site that would not be used for the Arena development) impacting the potential for further developments to be catalysed in future by the Arena.
- **Adjacent sites in the BTQEZ:** The former Post Office sorting depot site has been purchased by the University of Bristol. This accounts for 11,250 sq m of the 60,700 sq m of the commercial floorspace available on adjacent sites in the BTQEZ. This also impacts the potential for further developments to be catalysed in future by the Arena.

³⁰ Net Present Value refers to the value of the future costs and benefits of a project, policy or intervention that have been discounted to be presented in today's value.

³¹ In order to assess this, the estimated benefits were compared by AMION to a reference case based on the development on the site it is thought would occur if the Arena was not brought forward. It assumed that, in the absence of an Arena, the Arena Island site would be developed for commercial and residential uses. These would be brought forward over a longer time period (from 2021 onwards).

- **External data:** There have been updates to the external data used in the analysis (e.g. ONS economic multipliers and HCA employment densities).

On the basis of the findings of our review and taking into consideration the developments in relation to the Arena that have occurred since the AMION assessment was undertaken, it is our view that the results presented by AMION are no longer valid.

4.4.2 Summary of KPMG's revised economic impact assessment

Given the issues identified through the review of the AMION economic case, in light of developments in relation to the Arena, since the case was prepared, KPMG conducted a revised economic impact assessment to reflect the developments and to address any other wider issues identified in our review.

We have focused our assessment on the costs and economic impacts associated with the proposed Arena going forward and the value for money of any additional funding required for the project. BCC's decision of whether to proceed with the proposed Arena should be made on the basis of the future costs and benefits of the project, therefore we have not included costs or benefits already incurred / generated in relation to the Temple Island Arena project in our analysis.

The Background Document contains in detail the key inputs, methodological approach, assumptions used in our analysis, and reasoning for how this may differ from the approach taken by AMION.

Our revised analysis covers the economic impacts in terms of:

- the construction phase of the Arena;
- the operation of the Arena, including the supply chain (indirect) impacts and induced impacts;
- visitor spending in Bristol; and
- the potential wider developments on adjacent sites that may be catalysed by the Arena.

We have assessed the economic impact over a 25 year period.

Our review of the economic case and revised estimates of the economic impact take into account the additionality of impacts in terms of the displacement of other activity in Bristol and the leakage of benefits outside of the West of England. Our estimates do not, however, take into account the deadweight, i.e. what would happen if the Arena did not come forward on Temple Island. On this basis our analysis, in NPV terms, indicates that:

- The construction of the Arena could generate an estimated £107.3m of temporary GVA and 141 annual FTE jobs (in net terms) over the construction period.
- The operation of the Arena, and the wider spending of Arena attendees linked to their visit, could generate an estimated £387.1m of GVA and 615 FTE jobs (in net terms) over a 25 year period.
- The extent to which the Arena may catalyse wider developments on adjacent sites is diminished as a result of the University of Bristol and Temple Meads Station developments. However, BCC stakeholders have suggested that 2,110 sq m of the remaining adjacent sites may be catalysed by the Arena.³² If these sites are developed, it would generate an additional estimated £2.2m in net

³² We note that it is possible that the plans for the Arena have already facilitated developments across the Temple Quarter by providing developers with the confidence to invest in the site. However, our study is forward looking and has, therefore, not assessed the extent or the scale to which this has occurred.

GVA per year in present value terms from the development of these sites coming forward at a faster pace as result of the Arena.

- Based on BCC's estimates, £8.8m in business rates could be generated over the 25 year lease period.

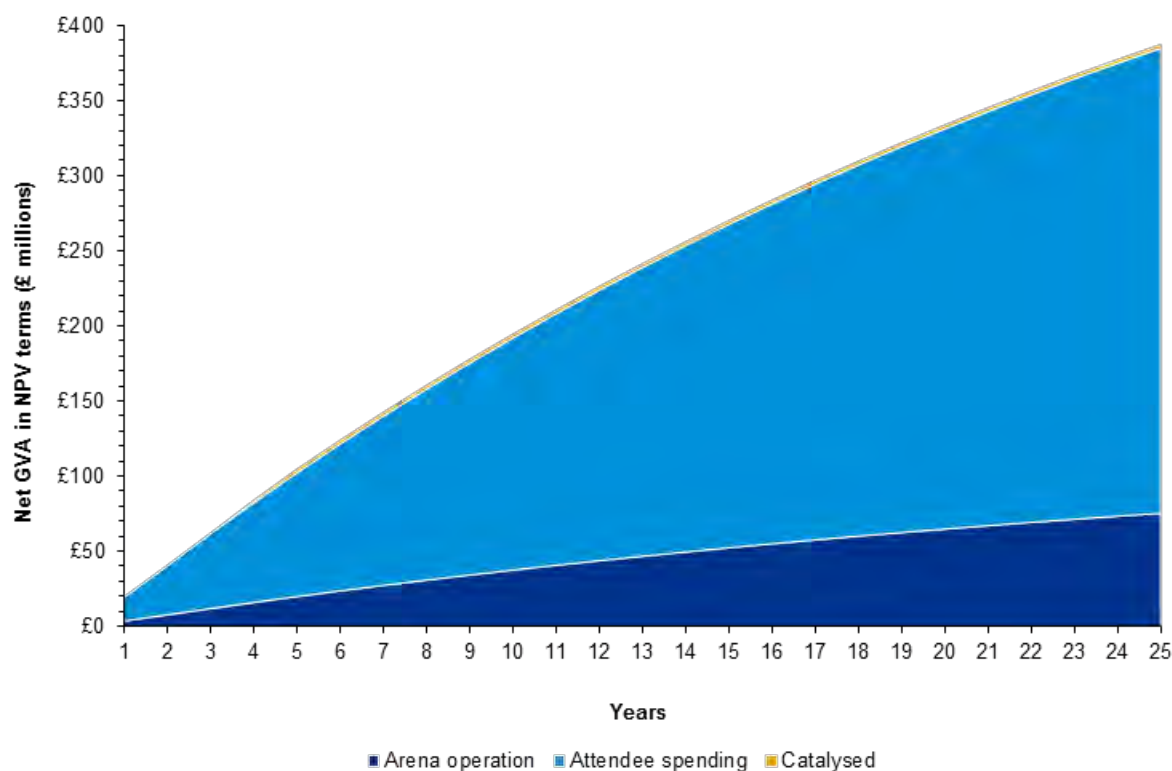
Figure 9: Net GVA and employment, in NPV terms, over 25 years³³

		25 year
GVA	Arena operation	£75.4m
	Attendee spending	£309.5m
	Catalysed development	£2.2m
	Total	£387.1m
Employment	Arena operation	210
	Attendee spending	405
	Catalysed development	46
	Total	660

Source: KPMG analysis

It is expected that the economic impact will increase on a year-on-year basis for the first 3 years as the Arena Operator "ramps up" activity. Figure 10 below sets out the cumulative net economic impact in NPV terms over the first 25 years of operation.

Figure 10: Cumulative net GVA impacts (in NPV terms) associated with Arena over 25 years



Source: KPMG analysis

³³ Totals may not sum due to rounding.

4.4.3 Summary of KPMG's review of AMION's assessment of social impacts associated with the Arena

In addition to the economic impacts, we have also reviewed the assessment of potential social impacts which could be generated through the construction and operation of the Temple Island Arena.

In its 2016 review, AMION set out a number of possible wider benefits that could arise through the Arena development. The social impacts identified by AMION were centred on five core themes:³⁴

1. perception, image and city profile;
2. local business impacts;
3. attraction of visitors;
4. quality of life; and
5. capacity and skills.

We note that AMION's assessment of the wider social benefits was wholly qualitative and did not attempt to monetise any of the benefits. Furthermore AMION's assessment of social impacts does not reference or provide detailed evidence to support its findings and did not indicate the specific activities that would, beside the construction of the Arena, create the outcomes it presented. Given this, we consider that there remain significant gaps in the evidence base in relation to potential social impacts of the Arena and insufficient evidence from the AMION assessment to understand the full socio-economic impacts of the proposed development.

4.4.4 Summary of KPMG's social impact assessment

Given the gaps identified in the existing assessment of potential social impacts of the Arena, KPMG reviewed available evidence in this area, drawing on the proposals and agreements with the Arena contractor and operator, views expressed in stakeholder interviews and wider evidence from relevant academic studies and broader literature.

Our assessment considers social impacts arising through: the construction of the Arena; the general operation and activities of the Arena; and the broader cultural impact.

Our approach to assessing the social impact of the Arena draws on guidance set out in the SROI Network's 'A guide to Social Return on Investment'³⁵. This includes adopting an "impact mapping" approach to identify, for both the contractor and operator, the main inputs and activities (for example donations and access to facilities); the associated outputs and outcomes; and resultant the socio-economic impacts for the beneficiaries and the wider community.

Summary of social impacts generated through the construction of the Arena

We have considered the social impacts that may be generated through the inputs and activities of the contractor; Buckingham, both leading up to and during the construction of the Arena.

We found that:

- In terms of the planned inputs and activities we found that Buckingham is collaborating with BCC and other local stakeholders, such as Job Centre Plus, to finalise targets in a number of areas including recruitment of local people within a specific radius; training and apprenticeships for local people, and the estimated project expenditure within the local community through the donation of

³⁴ AMION consulting (2016) Bristol Arena –Economic Appraisal – Revised Draft

³⁵ Cabinet Office. 2012. 'A guide to Social Return on Investment'. See:

https://www.bond.org.uk/data/files/Cabinet_office_A_guide_to_Social_Return_on_Investment.pdf

staff and management time, direct cash investment and gifts in kind³⁶. We understand that the employment, skills and community targets form binding contractual undertakings.

- These activities are likely to contribute toward positive social outcomes and impacts, for example, increased employment, increased wages and reduced likelihood of entering into unemployment³⁷.
- However, the scale of outcomes and impacts is dependent on the finalised targets that will be set for each of the inputs and activities as well as the nature of community support activities and the specific community initiatives engaged with.

Given that the targets have not been finalised and that the Buckingham Employment and Skills Plan is still in development, it is not possible to quantify the potential impacts at this stage.

Our assessment also considers the broader social impacts associated with the construction of the Arena. We note that the proposed Arena would contribute toward the regeneration of a large brownfield site in the Temple Meads Quarter of Bristol. The impacts associated with this are linked to the revitalisation of the area public realm improvements and transformation of the site to create safe public spaces and pathways. While the economic impacts associated with this are captured in the analysis, linked to economic use of the site and the attraction of visitors, the wider social impacts are less tangible and not possible to assess in monetary terms.

Summary of social impacts generated through the operation and activities of the Arena

The main inputs and activities associated with the operation of the Arena, that may generate social impacts are linked to the staging of events as well as broader community engagement activities the Arena Operator may undertake.

We found that:

- The Arena Operator has estimated that the Arena will host approximately 600,000 attendees per year. As a proportion of these attendees will be from outside of the Bristol area, and possibly outside of the West of England, there could be wider impacts associated with the Arena attracting increased visitors to Bristol and raising the profile of the City. The impacts arising from the spending of these visitors in the local area is captured in our economic case analysis.
- The Arena will deliver an enhanced corporate hospitality offering in Bristol a venue suitable for events such as awards ceremonies. In stakeholder interviews with BCC and Destination Bristol it was suggested that this could yield socio-economic impacts through raising the profile of Bristol both nationally and internationally and attracting more visitors to Bristol.
- As part of its bid for the contract, the Arena Operator as, submitted a number of examples of how it could engage with the local community. The operator proposed a multi-faceted approach to community engagement which could involve³⁸: providing direct financial support for local projects; mutual fundraising; resident only events and priority tickets; and the fostering of local arts and enterprises.
- If the example community engagement activities suggested by the operator are put in place in Bristol, it is possible that they will generate social impacts, for example, in terms of helping to improve community cohesion, social inclusion and could create social value. However, it will depend on factors including the specific activities undertaken, the number of individuals participating/ benefitting and the projects supported. No evidence was available in relation to the specific outcomes and impacts achieved in other locations where similar initiatives have been implemented by the operator. In agreement with the Operator, community activities not promoted

³⁶ Buckingham Group Contracting Limited (2017) Employment and Skills Plan (ESP) for Bristol Arena (revised March 2018).

³⁷ Our analysis of the economic impacts captures the GVA and employment associated with construction of the Arena. This analysis provides a quantitative assessment of the potential impact of the policies concerning the recruitment of local people and the use of local suppliers.

³⁸ SMG and Live Nation (2016) Appendix E Approach Statements.

by the Operator can take place at the Arena, however, these activities may have to be funded by other parties.

In terms of the scale of social impacts that could be realised, the lack of detail about the activities and availability of evidence means that it is not possible to quantify and monetise them. We note that to the extent to which there are broader improvements to the visitor economy, e.g. from repeat visits to Bristol or through the enhanced profile of the City, additional socio-economic impacts could be realised. At this stage, a lack of evidence means that it is not possible to forecast the potential change in visitor numbers (beyond Arena attendees) arising from the Arena's operation. We also note that at this stage the Arena Operator is not contractually committed to undertake community engagement activities and no details of specific activities, or targets, have been agreed informally. We understand from BCC that when tendering for an Arena Operator and agreeing contractual terms a decision was made not to place contractual obligations on an operator to provide community engagement activities but instead to maximise operator rental income.

Summary of the social cultural impacts of an Arena

We also assessed the extent to which evidence suggests that an arena could have the potential to have a positive impact on the overall cultural offering of Bristol to the benefit of the local communities.

We found that:

- Evidence suggests that culture has both an intrinsic and social value and that engaging and participating in cultural activities can increase overall satisfaction and have a positive impact on personal wellbeing³⁹. Furthermore, engaging in culture can have wider social benefits in terms of health, education and community. Many studies have shown that the arts can have a positive impact on a person's health, both physical and mental wellbeing^{40,41}.
- Links between arts and culture⁴² and community outcomes have also been identified empirically in some studies. Participation in arts and culture has been found to have a positive relationship with social capital. It has been found that those who participate in arts-related activities have greater social interaction, self-esteem and more well-developed social relationships and networks. Furthermore, studies have found that cultural participation can contribute to community cohesion, civic pride and increase social inclusion, overall making communities safer and stronger⁴³.
- It is also thought that participation in arts and culture can improve the educational attainment of children and young people. It has been found that participation in arts activities can be linked to improvements in young people's cognitive abilities and transferable skills⁴⁴. Other studies have found that engaging with arts and culture from a young age is associated with higher academic attainment and greater skills proficiency⁴⁵. In the long-term participation in arts and cultural activities can increase the likelihood of a young person entering further and higher education.⁴⁶

An arena will provide local communities and individuals access to a wider variety of cultural events than currently available in Bristol, including live music acts, musicals and theatre, family events and conferences and exhibitions. This access could promote the large range of positive benefits noted above that people and communities can experience as result of engaging with cultural activities.

³⁹ Department for Culture Media & Sport (2014) Quantifying and Valuing the Wellbeing Impacts of Culture and Sport.

⁴⁰ Taylor et al (2015) A review of the Social Impacts of Culture and Sport

⁴¹ Staricoff, R.L. (2004) Arts in Health: a review of medical literature.

⁴² Culture has been broadly defined, and includes activities registered on the Taking Part list which defines activities for the National Survey of Culture, Leisure and Sport. Engagement in culture is defined as attendance at cultural events/ sites. These include attending a heritage site, attending an arts event and attending a museum, library or archive.

⁴³ National Statistics (2009) People and culture in Scotland: Results from the Scottish Household Survey Culture and Sport Module 2007/2008.

⁴⁴ Newman et al (2010) Understanding the impact of engagement in culture and sport, a systematic review of the learning impacts for young people. CASE, DCMS.

⁴⁵ Newman et al (2010) Understanding the impact of engagement in culture and sport, a systematic review of the learning impacts for young people. CASE, DCMS and Vaughn et al (2011) Bridging the Gap in School Achievement through the Arts.

⁴⁶ Department for Culture, Media & Sport (2015) Further analysis to value the health and educational benefits of sports and culture.

However, we note that a range of these broader social impacts could be realised, in part dependent on the nature of arts and culture events staged at the Arena as well as the audiences reached.

4.5 Value for Money conclusions

Value for Money is at its core, an assessment of the optimal use of resources to achieve the intended outcomes. When undertaking a VfM assessment, the National Audit Office (NAO) uses three main criteria^{47,48}:

- economy – minimising the cost or quantity of required resources;
- efficiency – in the flow from inputs to the resulting outputs; and
- effectiveness – ensuring the actual results from public spending are as intended.

The BCR provides an indication of the total value for money that the Arena project would deliver. Using cost information provided by BCC and our updated analysis of the economic impacts associated with the Arena, we have estimated the economic impacts associated with the Arena, in NPV terms and the resultant BCR:

- Over a 25 year appraisal period, we estimate the economic NPV of the Arena is £282.6m, with a BCR of 3.2:1.

Our BCR and economic NPV estimates only capture the economic benefits from the ongoing operation of the Arena.

In addition, there are likely to be a range of social impacts associated with the Arena development through the construction and operational phases. While there is insufficient information available at present in terms of the outputs that could be delivered, and uncertainties about their realisation given the lack of contractual obligations on the Arena Operator, it is important that they are considered as part of the overall BCR of the project. Any positive social impacts that arise would improve the estimated BCR and economic NPV values and therefore, the value for money of the project.

In net terms, the direct, indirect and induced impact of the operation of the Temple Island Arena, wider spending of attendees and catalytic development could generate Net Present Value (NPV) of Gross Value Added (GVA) of approximately £387.1m and up to 660 Full Time Equivalent (FTE) jobs in the West of England over 25 years. This provides justification for the use of public money for a lower than commercial rate of return.

While the overall BCR of the Arena project is positive over 25 years, to better understand Value for Money it is helpful to compare this against benchmarks and against alternative schemes to understand whether benefits against costs are being maximised.

In terms of other benchmarks against which the estimated BCR for the proposed Arena can be assessed, we are not aware of any detailed estimates for similar schemes. Furthermore, there is no government guidance about expected levels of the BCR for such capital developments, although the WebTAG guidance⁴⁹ details BCR benchmarks for the assessment of the value for money of transport projects. Using these benchmarks, the BCR of the Temple Island Arena would be considered 'High' over a 25 year period. The very different nature of transport schemes should be taken in to account, however, when considering the relevance of these thresholds for value for money.

The VfM assessment of the Arena extends beyond consideration of the BCR. Whilst the upfront cost is greater than the current budget of £123.5m, with appropriate financial structuring, the project income will still meet the costs of the project in every year of operation. Based on current assumptions, the

⁴⁷ <https://www.nao.org.uk/successful-commissioning/general-principles/value-for-money/assessing-value-for-money/>

⁴⁸ In some cases, equity is also considered as a fourth criteria of VfM assessments.

⁴⁹ Department for Transport (2015) Value for Money Framework: Moving Britain Ahead.

project is forecast to deliver a total surplus over the life of the project of £1.3m. There is risk associated with income projected in the later 25 years of the asset's life, given the operator agreement is 25 years long, but our sensitivity analysis indicates this does not materially alter this conclusion. Aecom has indicated that it believes the Target Cost estimate is robust and the risks associated with construction can be managed.

In order to comprehensively assess the value for money and the option to develop the Arena on the Temple Island site, there is a need to better consider:

1. Alternative developments that could be delivered on the Temple Island site and their value for money. This forms the reference case against which the Arena on the existing site should be compared. Any potential alternative developments on the Temple Island site should be assessed to consider the wider strategic and economic development opportunities, including consideration of:
 - an assessment of the strategic case an alternative development at Temple Island, and how this may compare to the strategic case for an arena on Temple Island;
 - the key financial and deliverable risks of the alternative development proposal;
 - the potential economic impact that may be generated through an alternative development; and
 - any public sector investment that may be required to bring forward an alternative development at Temple Island, including an assessment of the overall value for money of any proposed alternatives.
2. The alternative arena proposal for Bristol at Filton brought forward by YTL. An arena at Filton should be assessed in accordance with the five cases model⁵⁰, including consideration of:
 - how this proposal may weaken the rationale for public intervention and funding and the strategic case for the Arena on Temple Island;
 - the extent to which an arena at Filton could achieve BCC's objectives for the Arena, as well as contribute towards wider City and regional objectives;
 - the key financial and deliverability risks for the Arena at Filton, including consideration of the commercial readiness of the proposal; and
 - an assessment of the potential economic case of the Filton Arena, and how this may compare against the Arena at Temple Island.

While these assessments do not form part of the scope of this report, they are being considered within KPMG's others reports to BCC.

⁵⁰ HM Treasury (2013) Public sector business cases: Using the five case model. Green Book supplementary guidance on delivering public value from spending proposals.

5 Recommendations

Whilst the strategic and economic case for an arena is well established, given the changes since the business case was approved we recommend the following additional steps are taken before a decision to proceed with the Arena is made:

1. A review is undertaken of the alternative proposal of an arena in the Brabazon Hangar, including its ability to provide comparable social and economic benefit and its commercial deliverability. This review has now been completed and our findings are provided in our report entitled 'Assessment of alternative plans for an arena in Bristol'.
2. Given the changing use of the wider Temple Island site and competing development plans for the site, in part catalysed by the intended development of a portion of the site by the University of Bristol, the potential alternative uses of the Temple Island site should be fully explored so that the Value for Money conclusion fully reflects the opportunity cost of using the site for an arena. This review has now been completed and our findings are provided in our report entitled 'Assessment of alternative development plans for the Temple Island site.'
3. The links between the Arena, its location and a wider City plan for infrastructure development and need is further strengthened.

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