

The economic legacy of the London Olympic Games

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Oxford Economics was founded in 1981 to provide independent forecasting and analysis tailored to the needs of economists and planners in government and business.

In conjunction with Grant Thornton, Ecorys, and Loughborough University, we were commissioned by the UK Government to undertake a Meta-evaluation of the 2012 London Olympics and Paralympics Games¹. Using a range of data sources, existing evaluations and work in progress reports we quantified a number of possible economic benefits. In some instances a lack of information meant we have had to provide a range of potential benefits.

This article provides a high level discussion of the findings of the impact analysis and discusses the available evidence on the legacy of the Games, including the role the Games have played in regenerating East London.

1. Overview of economic impacts

Oxford Economics were provided with detailed information on the £11bn of public money spent on constructing the venues, hosting the Games and the post games construction. The investment was spread over a ten year period from 2004-2014. In addition to this investment we also estimated the impact of the Games on tourism in 2012, of catalyzed private sector investments in East London, inward investment and trade deals to the UK, and employability and skills development. Given the uncertainty of the tourism impacts, and planned future investment deals we provided a range of economic impacts. Table 1 summarizes the overall findings from the impact analysis in the Meta-evaluation. The figures include the direct, indirect and induced impacts from the various economic benefits noted above.

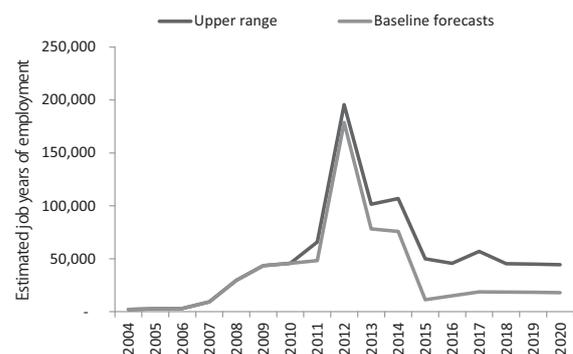
¹ <https://www.gov.uk/government/publications/report-5-post-games-evaluation-meta-evaluation-of-the-impacts-and-legacy-of-the-london-2012-olympic-and-paralympic-games>

Table 1: Olympic related net benefits, 2004 to 2020

	Baseline	Upper range
Output (£m 2009)	57,700	82,960
GVA (£m 2009)	27,900	40,540
Job years of employment	617,780	893,340
Wages (£m 2009)	13,980	20,090

Source: DCMS and Oxford Economics

Given the available data and the time periods used, we estimated that the Olympic related benefits could range from between £27.9bn and £40.5bn of net GVA over the period 2004 to 2020. In terms of job years of employment, we estimated the impacts to range from 617,780 to 893,000 over the period. Under the baseline analysis (lower range) 41% of Olympic related net job years of employment were accounted for after the Games, whereas the upper range suggested 55% would be realized post games (Figure 1).



Source: DCMS and Oxford Economics

Figure 1: Estimated net job years of employment, 2004 to 2020

Unsurprisingly at the regional level, London enjoyed the largest Olympic related benefits between 2004 and 2020. However the benefits were found to be by no means exclusively concentrated in the host region. Most parts of UK had, and were forecast to continue to, enjoy supply chain, tourism related, trade and investment benefits.

Table 2: Baseline Olympic related net benefits by region, 2004 to 2020

	Total output (£m, 2009 prices)	Total GVA (£m, 2009 prices)	Total job years of employment	Total earnings (£m, 2009 prices)
London	£19,140	£9,430	138,720	£4,070
South East	£7,970	£3,920	92,260	£2,040
East of England	£5,220	£2,540	61,000	£1,260
West Midlands	£4,660	£2,140	57,720	£1,080
Scotland	£4,540	£2,290	51,160	£1,500
North West	£3,730	£1,770	49,690	£910
Yorkshire and the Humber	£3,090	£1,410	38,630	£760
East Midlands	£3,090	£1,410	37,990	£740
South West	£2,910	£1,390	41,370	£750
North East	£1,280	£640	16,650	£330
Wales	£1,270	£570	20,310	£350
Northern Ireland	£790	£380	12,270	£210
Total	£57,700	£27,900	617,780	£13,980

Source: DCMS and Oxford Economics

Equally all sectors of the economy were predicted to benefit. Baseline estimates suggested that the retail sector and ‘Professional, scientific and technical’ related activities would experience the most significant labour market impacts over the modelling period. This was closely followed by the construction sector.

Table 3: Baseline net job years of employment by sector, 2004 to 2020

Total employment (job years) 2004 - 2020	UK			
	Direct	Indirect	Induced	Total
Agriculture, forestry and fishing	0	4,690	5,840	10,530
Mining and quarrying	0	17,030	2,250	19,280
Manufacturing	11,630	20,580	13,970	46,180
Utilities	3,860	3,100	1,330	8,290
Water and waste	350	670	1,200	2,220
Construction	47,520	25,060	4,650	77,220
Wholesale and retail	9,200	14,930	61,970	86,110
Transportation and storage	2,860	11,400	14,710	28,980
Accommodation and food	8,480	2,130	31,300	41,900
Information and communication	9,810	6,620	5,580	22,010
Financial services	6,210	4,300	8,950	19,460
Real estate	3,500	1,900	6,890	12,280
Professional, scientific and technical	36,050	33,540	14,450	84,050
Administrative and support	27,050	33,000	14,920	74,970
Public administration	3,880	2,270	1,930	8,080
Education	5,810	4,660	5,750	16,220
Health	15,400	1,770	7,640	24,820
Arts, entertainment and recreation	11,220	4,090	10,640	25,950
Other service activities	2,140	2,280	4,830	9,240
Total	204,970	194,000	218,810	617,780

Source: DCMS and Oxford Economics

2. A commitment to legacy

The literature suggests that the build up to the games can result in notable improvements in employment (as was the case in both Athens and Barcelona). However the legacy impacts are less obvious and are often not quantified in the literature.

In the build up to the London 2012 Olympic Games the UK Government made repeated commitments to maximize

the legacy of the Games. Clearly the investment in infrastructure and venues as well as hosting the event would result in measurable short term impacts in construction, its supply chain and in 2012 the hospitality sector. However it was recognized that the longer term opportunities offered much greater economic and social returns from this significant investment of public money.

Consequently in June 2008 the Department for Culture, Media and Sport (DCMS) published “*Before, during and after: making the most of the London 2012 Games*” which set out national, regional and local commitments to maximize the legacy impacts. Then in December 2010, DCMS published “*Plans for the legacy from the 2012 Olympic and Paralympic games*”. The report set out the Government’s aim to maximize the benefits of the Games, focusing on the four areas of greater participation in sport, economic growth, community engagement and regeneration of East London.

So did the London 2012 Olympic and Paralympic Games provide legacy impacts? We provide a short discussion on below.

3. Regeneration of East London

In the decades before London was awarded the Games, East London had consistently underperformed the London average. It was hoped that public investment in venues and supporting infrastructure (like improvements to public transport) would leverage private sector investment and generally act as a catalyst for economic growth. In addition legacy projects such as the ‘Here East’ (based in the former Olympic Press and Broadcast Centre) would offer 1.2 million sq ft of commercial space for technology companies to help maintain the economic momentum in the area and encourage further investment.

Analysis undertaken by Oxford Economics for the six Host Boroughs in 2013 found that the Host Boroughs had already captured a growing share of London’s employment and GVA. They had also been amongst the fastest growing boroughs over the recession in London (with respect to employment) and they had experienced amongst the largest growth in population (176,000 additional people from 2005 to 2011). Indeed four of the six Host Boroughs were in the five fastest growing local authorities in London with respect to population growth.

Perhaps more importantly, a significant proportion of new residents had high levels of skills, with an increase of

almost 168,200 people with degree level skills. As a result, the additional population would have a high propensity to be employed (and conversely a lower likelihood of being unemployed or inactive).

While we found challenges remained, there was further investment planned for this part of London. As we noted in our Meta-evaluation a considerable amount of additional investment was secured for East London out to 2030. Investments ranged from office blocks, to retail, to housing. Table 4 provides an overview of selected major developments that were leveraged from the public sectors commitment to transform East London.

Table 4: Selected East London developments

Development name	Gross direct jobs (total), 2030	Sectors
Stratford	26,215	Wholesale & retail, info & comms, finance, professional, admin & support, arts / entertainment
Sugar House Lane	1,572	Wholesale & retail, info & comms, finance, professional, admin & support
iCity	3,600	Wholesale & retail, transport, accommodation, info & comms, finance, real estate, professional, admin & support, education, health, arts / entertainment, other services
QE Olympic Park	4,421	Wholesale & retail, transport, accommodation & food, info & comms, admin & support, arts / entertainment, other services
Westfield	10,000	Wholesale & retail, accommodation & food

Source: DCMS

In our 2013 Meta-evaluation we estimated that these catalyzed investments had the potential to provide significant net impacts, specifically £7.2bn in GVA and 163,000 jobs years over a five year period.

4. Tourism

There was substantial displacement of visitors to London and the UK in 2012 due to perceptions of

overcrowding, disruption and price rises. However the average expenditure of Games visitors was around double that of a normal visitor and as a result there was a substantial net increase in overseas visitor spend of £235m (excluding ticket sales).

To try and maximize the tourism legacy of the Games, the events were held in a range of purpose built and converted locations meaning the media coverage showcased a considerable amount of London and its heritage. It was hoped that the media coverage and the word of mouth experiences of those who visited would leverage further future visitors from overseas markets.

At the time of writing we are unaware of any recent study that has quantified the tourism legacy.

5. Employability

In 2006 the London Employment and Skills Taskforce was formed with the aim to tackle worklessness in all London boroughs up until 2012. The overarching target was to reduce worklessness in London by 70,000 by 2012, supporting the Government's target to achieve an overall employment rate of 80% by 2020 and help close the gap between London and the rest of the country.

In addition it has a target for the provisions of 100,000 training places, of which a quarter were expected to be taken up by residents of the host boroughs. The 2007 report "*The Employment and Skills Legacy*" by the Greater London Authority noted that "of the 720,000 people of working age resident in the host boroughs, a quarter (around 180,000) have no qualifications at all.

SQW's report "*Olympics job evaluation*" concluded that when all of the sources of monitoring and evaluation are brought together an estimated lower and upper bound gross estimate of 61,749 and 76,050 previously workless Londoners secured Games related employment. Although these figures were themselves subject to ranges, and they did not consider the effects of additionality, deadweight or substitution they were consistent with the target.

6. Trade and investment

UKTI used the London 2012 Olympic Games as an opportunity to showcase UK business and the UK economy. The objective was to attract and secure foreign trade and investment. At the time of writing the Meta-evaluation, some £10bn of the £11bn Government target had been secured through events such as the British Business

Embassy and overseas campaigns such as GREAT.

As noted in the meta evaluation “The Games and related promotional activities have clearly influenced perceptions of the UK as an investment destination, instilled confidence in companies about the future of their UK operations and helped UK businesses to access new export markets because of Games-related contracts.”

In addition through successful planning and delivery of the Games, UK businesses have shown they can project manage and construct large scale infrastructure investments. This track record should help secure large contracts elsewhere and provide lessons that can be applied to other projects in the UK such as nuclear new builds.

7. Sustainability

The Commission for a Sustainable London 2012 was set up to manage and encourage sustainable approaches to the construction of the venues and infrastructure.

A large number of the commitments set out in the “*London 2012 Sustainability Plan*” were achieved², including at least 90% of demolition waste reused or recycled, all permanent venues and non-residential buildings designed to reduce water consumption by 40%, the Olympic Village achieving 25% more energy efficiency than current building regulations; and the Olympic Park project using 100% sustainably sourced timber.

Following the success of the Sustainability Plan a number of on-going and future infrastructure projects have adopted similar approaches to sustainability in design and construction.

8. Sport

Finally the UK Government hoped the Olympics would ‘inspire a generation’ of young people to participate in sport. Increased participation in sport would bring benefits from improved health, community cohesion, and social inclusion. It can also encourage further volunteering, sustain employment and even create job opportunities.

There is evidence that participation in sports increased across all age cohorts studied because of the Olympics (though this evidence is concentrated during the summer of 2012 and the following 6 months). However the Government report “*Inspiring a generation: A Taking*

² <http://learninglegacy.independent.gov.uk/documents/pdfs/sustainability/5-london-2012-post-games-sustainability-report-interactive-12-12-12.pdf>

Part report on the 2012 Olympic and Paralympic Games” noted that “while it appears that the 2012 Olympic and Paralympic Games had an impact on motivating some people and groups to get more involved in sports, cultural activities and volunteering, the real long-term impact may not be felt for some time”.

The Games did prove to be a catalyst for improved elite sporting performance in the UK, with Team GB celebrating their most successful Games since 1908. It is hoped the success will inspire a new generation of world class athletes, but again this is likely to be a longer term benefit, and one that will be hard to identify.

9. Conclusions

Existing evidence shows that the construction related activity and hosting of the London Olympic and Paralympic Games had a significant economic impact on the UK and London economies. Our analysis also shows that each of the 12 UK regions benefited, as did each of the broad sectors of the economy, either directly or indirectly through supply chain spending and through consumer spending.

The scale of the economic and social legacy from the Games is more difficult to quantify. However we can be more certain that they are higher because of the UK Government’s early commitment to maximize the long term benefits of the Games.

Evidence on the legacy of the Games is limited to work undertaken in late 2012 or 2013, and while more work is required to fully understand the scale of the impacts, there is evidence that the Games has left a legacy of:

- Higher participation in sport;
- The physical transformation and continued regeneration of East London;
- Expertise and experience of delivering major infrastructure projects;
- Trade and investment deals for UK businesses;
- A new approach for including sustainability in the design and construction of major infrastructure projects; and
- A pool of previously workless Londoners with more labour market experience and in some cases higher skills.

In addition London should benefit from the £6.5bn that was invested in new transport infrastructure. This included among other projects:

- the Jubilee line upgrade;
- extensions to the DLR;
- the Javelin train service;
- redevelopment of stations including Stratford and Green Park; and
- new cycling and walking routes.

10. Lessons from London

The experience of Barcelona in 1992 led to a realization that mega sporting events can have a transformational impact on a city. Consequently it has been used as a case study ever since. The anecdotal evidence suggests London's experience could also be held as a best practice guide to using a sporting event to achieve economic and social aims. So what are the lessons that can be learnt from London's experience?

From the early stages of the bidding process to delivery of the Games political cross party support was important. The UK Government changed during this period and yet the political changes did not adversely affect planning or delivery. This is partly linked to the long-term Vision of the Olympics, which was articulated early in the process.

In addition, the delivery team was created from a mix of public and private sector individuals with a track record of delivering. The leadership across the political institutions was also influential in selling the Vision of the Olympics and enthusing key stakeholders.

Perhaps the main lesson is that it is possible to achieve a legacy from the Olympic Games. It relies on a clear vision established early in the process and backed by sufficient planning. This also has to be accompanied by sufficient resources to achieve that vision.

Events like the Olympics can often be used to redevelop deprived urban areas. The London Olympic Games was used to redevelop and reenergize the East of the city. To do this effectively the UK Government not only concentrated on the physical legacy of the Games, but the legacy on people and residents of this area of the city.

From the start of the bidding process the bid from London contained a number of pledges. One was to leave a physical legacy in the city. This was based around long-term planning, development, management and maintenance of the Park and its impact on the surrounding area after the London 2012 Games.

The responsibility for this was given to the London Legacy Development Company (LLDC). The LLDC was

set up to "use the once-in-a-lifetime opportunity of the London 2012 Games and the creation of Queen Elizabeth Olympic Park to develop a dynamic new heart for east London, creating opportunities for local people and driving innovation and growth in London and the UK³".

The LLDC are still involved in efforts to further develop East London. Public investment is still being allocated which has leveraged further private sector investment. In doing so the LLDC has a number of targets like ensuring job opportunities are open to residents, projects are sustainable and there is adequate community engagement.

The LLDC has also been keen to communicate the current and future employment opportunities to residents of East London. A significant amount of investment is still planned for the area. Oxford Economics modelled the impact of public and private sector investments in commercial and residential property in 2013 for the Olympic Host Boroughs. We also worked with the LLDC in a subsequent piece of analysis to turn the sectoral job impacts into occupational impacts so that the LLDC could engage with local schools and show the school aged residents the scale and type of job opportunities that there could be once they left school, college or higher education.

In addition to the LLDC, a number of additional bodies have been established or assigned responsibility for delivering Olympic legacy in the city of London and across the UK (see Figure 2):

- Sports England invests in organizations and projects that will get more people playing sport and creating opportunities for people to excel at their chosen sport. They have a UK wide remit, but the world class sporting venues and facilities in East London will support their efforts in this part of the city.
- The Legacy List was an independent charity for the Queen Elizabeth Olympic Park, set up in 2011 to support the legacy of the Games in London. Their mission was to make creative connections between people and the Park by developing, commissioning and supporting high quality art, education and skill building initiatives, to engage, educate and inspire current and future generations. The Legacy List has merged with the Foundation for FutureLondon, the Olympicopolis charity, to "realise the ambition of a new cultural and university district on Queen

³ <http://queenelizabetholympicpark.co.uk/our-story/the-legacy-corporation>

Elizabeth Olympic Park.”⁴

- The aim of the Learning Legacy⁵ was to share the knowledge and lessons learned from the London 2012 Games construction projects and to raise the bar within the construction sector and to act as a showcase for UK plc.
- Legacy Trust UK is an independent charity, with the aim to build a lasting legacy from the London 2012 Games in communities across the UK by funding ideas and local talent to inspire creativity.

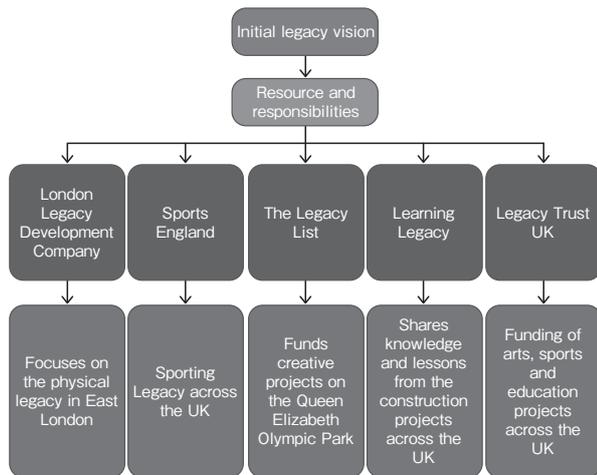


Figure 2: Realizing a legacy

⁴ <http://www.thelegacylist.org.uk/>

⁵ <http://learninglegacy.independent.gov.uk/index.php>