

Case Study: Expanding Heathrow

Heathrow Airport Limited commissioned WPI Economics to assess the state of the UK economy following the EU Referendum and to better understand the role that the quick approval of the third runway at Heathrow could play in ensuring the strength of the economy in the remainder of this Parliament.

To understand the potential short-term impacts of the Government giving the go-ahead to the development of the third runway, WPI Economics undertook modelling using case studies developed with major firms who would be involved in the first phase of the project,* developing an understanding of the potential numbers, types and profile of jobs that would be needed.

Jobs now and in the future

Our modelling suggests that, as work on planning and design increases dramatically, and as members of Heathrow's supply chain work to deliver the expansion within an ambitious time-scale, there would be an immediate economic boost. We estimate that within the first 2-3 years, expansion would support between 2,200 and 2,700 jobs. As well as this immediate boost to the

Granting permission to expand Heathrow now would in the next 2-3 years...

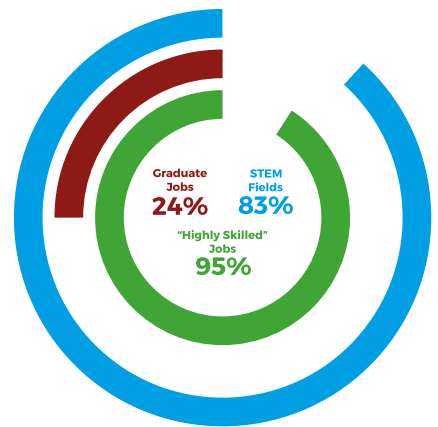
Support up to 2,700 jobs

c.2,700 Upper Estimate

c.2,450 Mid-range Estimate

c.2,200 Lower Estimate

Of which...



With an average salary of...



Source: WPI Economics analysis, 2016

economy, it would serve as a visible down payment on the economic gains that would be delivered by expansion, with the Airports Commission estimating that in total around 180,000 jobs could be created by 2050.

These jobs would also, almost universally, be concentrated in the high-skilled and high-paid sectors involved with the early stages of infrastructure development, such as architecture, surveying, design, and engineering. Over 80% of the jobs will be those with a STEM or equivalent background, and 95% of them would be in occupations classed as 'highly-skilled'. These positions would create a high level of economic value, reflected in the high average wage of the jobs, which we estimate at £57,000 per supported job. The direct total value of the jobs supported is estimated at £110m. When accounting for indirect value as a consequence of spending undertaken by those employees, the total impact would be even higher still.

Approving Heathrow's expansion immediately would mean that the initial work, and therefore hiring, would occur as the time-line for Brexit begins to accelerate. Whilst the exact dates are not yet known, if the design and planning process began now, an immediate boost to confidence could be stimulated through the creation of high-skilled jobs, combined with the wider job creation beginning to occur just as Britain may be exiting the EU in 2019.[†]

“The direct total value of the jobs supported is estimated at £110m.”

* Approximately 3 years.

† Assuming a two-year process from Article 50 being triggered in 2017.

Boosting skills and productivity

As well as supporting over 2,700 jobs in the next three years, the jobs themselves will help to address the skills gap. Approximately 25% of the supported jobs would be new graduate-level recruits, suggesting that progressing with Heathrow would help bring a new pipeline of talent into sectors such as engineering and design and act as an important contribution to boosting the skills and productivity of the UK economy.

The expansion of Heathrow could also have much broader impact on productivity. It is a complex, high profile project where, by working closely together, the major firms involved expect to innovate and drive the frontier of design and efficiency.

These would then be lessons that could be learned and applied across construction and infrastructure projects across the UK. This is the case for three reasons, first because the nature of the structure of the project and companies involved will necessitate a high degree of cooperation, including seconding employees directly to work with members of other companies. Second, the challenges faced are predominantly logistical and design-based, as opposed to overcoming regulatory or safety barriers as in energy projects. Last, the concentration of construction around one particular site, as opposed to across a large distance as in the case of roads or train lines, means that the companies will have to co-locate and work across company lines. All of these

characteristics make Heathrow well placed to create clusters of high-skilled jobs that will help enhance growth and productivity.

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Over the past decades Heathrow has been involved in leading edge thinking on projects such as the highly successful Terminal 5. Since then, improvement in the UK construction industry's productivity has significantly underperformed other UK sectors.

The Heathrow Expansion Programme represents the next opportunity for Heathrow to build on that experience and success. Heathrow are superbly positioned to procure with a vision that can set new benchmarks for UK design quality, construction productivity and operation effectiveness.

Jason Millett
COO Major
Programmes and
Infrastructure,
Mace Group

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A boost to business and a shop window for the UK economy

Finally, greenlighting the third runway and a number of other critical infrastructure projects would clearly demonstrate, both domestically and internationally, that the UK is serious about business and growth in the UK.

Most obviously, alongside the development of other infrastructure projects, it will demonstrate the Government's commitment to growth and start to tackle the UK's historic under-investment in critical infrastructure. Wider benefits would also be provided by the role that development would play in promoting the quality and strength of UK business. Firms we spoke to talked of the iconic nature of the of the project and how it would provide a significant boost to the reputation of the firms involved and the UK more generally.

With the need to become increasingly globally competitive and extend our trading reach post Brexit, the chance to promote and increase the strength of UK business on a global stage should not be missed.

“Heathrow's Expansion Programme will represent a showcase for British talent and ingenuity on a world stage. Heathrow will continue to innovate, and set standards for infrastructure that the rest of the world will follow. We are proud to play a part in this evolution, and look forward to designing the leading edge buildings, spaces and places that will define the next generation of airports across the world.

**Jolyon Brewis, Partner,
Grimshaw Architects
LLP**