OXFORD ECONOMICS

THE ECONOMIC IMPACT OF REDUCED ACTIVITY AT HEATHROW

DRAFT REPORT FOR THE LONDON BOROUGH OF HOUNSLOW

JULY 2020

London Borough of Hounslow

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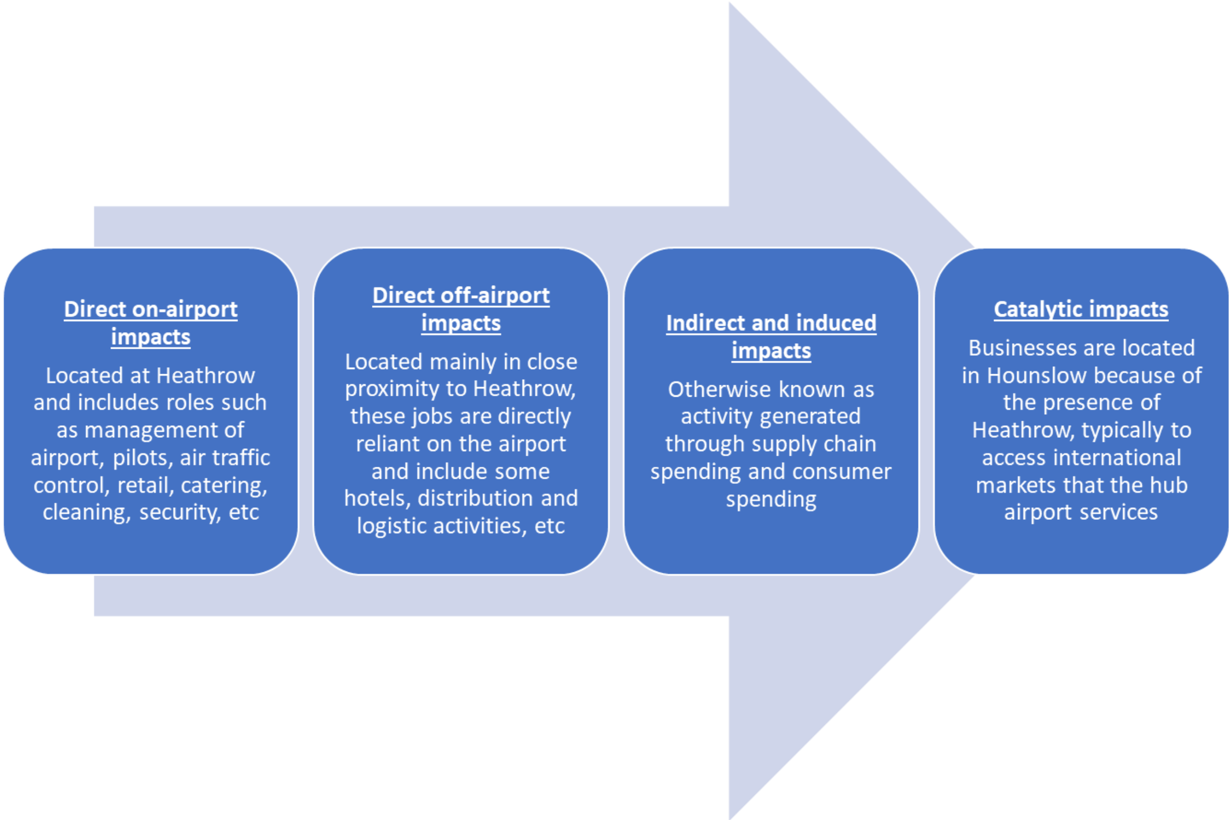
TABLE OF CONTENTS

EXECUTIVE SUMMARY

HEATHROW'S ECONOMIC IMPACT ON HOUNSLOW PRE-LOCKDOWN

Heathrow Airport is a key source of employment for Hillingdon (where it is based), but also for neighbouring London Boroughs. The airport supports employment through four main channels of activity (shown in the Fig below). However, the dramatic fall in passenger numbers and cargo at the airport threatens the security of many of the direct jobs located at Heathrow and surrounding it, as well as those in supply chains and subsequently those supported through the spending of wages. It could also impact on businesses that have located around the airport because of the international destinations it serves.

Fig. 1. The types of economic activity supported by Heathrow



Given the importance of Heathrow to the local economy of Hounslow, the Council commissioned Oxford Economics to estimate the economic impact of reduced activity at Heathrow now and in the future.

We estimate that of the 72,100 people directly employed at the airport in 2019, 13.2%, or just over 9,500, commute from Hounslow. We also estimate that Hounslow benefits from 1,500 direct off-airport jobs (i.e. jobs based in Hounslow that are directly reliant on the airport).

The logistics sector accounts for a large majority (70%) of the on-airport employment filled by residents of Hounslow. However, more than a fifth of these jobs were in the wholesale & retail, accommodation & food, and administrative & support services sectors. In broad terms, these roles tend to require lower skills and are therefore likely to be lower paid. They are also at more risk to reduced airport activity.

Once we account for the supply chain and consumer spending impacts that arise from those directly employed at or around Heathrow, we estimate the airport supported an estimated 11,000 workplace-based jobs in Hounslow in 2019.

However, given the volume of Hounslow residents working at the airport in Hillingdon, Heathrow has a much larger impact on the economy. To account for the jobs outside of Hounslow, but filled by Hounslow residents, we use a slightly different measure of employment called resident-based employment. This measure counts Hounslow residents in employment, regardless of where the job is based. **We estimate Heathrow supported just over 16,000 jobs for Hounslow residents.**

Heathrow also has a significant catalytic impact. Previous estimates suggest the catalytic impact could have accounted for between 13,395 and 26,790 jobs in 2010. [1] In addition, survey data show that the presence of Heathrow plays a key role in firms' decisions to locate in Hounslow. Indeed, 75% of firms in the transport & logistics sector state this, as well as proximity to other transport links such as the M25.[2]

CORONAVIRUS HAS HAD A DRAMATIC IMPACT ON HEATHROW

Measures put in place to stop the spread of the coronavirus have had a substantial adverse impact on the UK economy. All sectors have been affected, with aviation arguably amongst the worst. Lockdowns across the globe have effectively cut off demand for passenger travel, which has in turn reduced the capacity for air cargo.

Data for April 2020 shows that compared with the same month a year ago, **passenger numbers at Heathrow Airport had fallen by 97%[3] while cargo movements were down by 61.7%.**

Such an unprecedented fall in activity, would normally have led to substantial job cuts across the aviation sector including at Heathrow. However, the UK Government's Furlough Scheme has (so far) helped mitigate against mass unemployment.

Although the Furlough Scheme will be in place until at least October, major airlines have announced their intention to cut jobs (by as much as 30%), and if passenger numbers do not return quickly, more jobs could be vulnerable.

HEATHROW'S RECOVERY WILL TAKE YEARS

Tourism Economics and IATA forecasts for **the British air passenger market suggest the volume of passenger flows will return to 2019 levels by 2023**,

[1] Parsons Brinckerhoff and Berkeley Hanover Consulting, "Heathrow Employment Impact Study", 2013

[2] London Borough of Hounslow: Sectors Research (2015)

[3] https://www.heathrow.com/company/investor-centre/reports/traffic-statistics

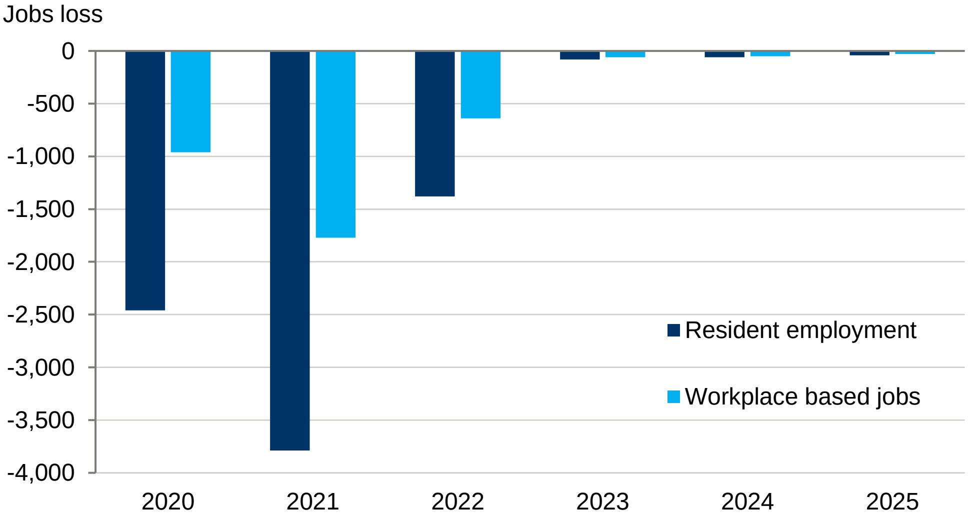
though this could be pushed out one year under their more downbeat scenario. Furthermore, the outlook for air cargo could be even more challenging. Our baseline outlook for UK trade in non-energy goods (although not a direct measure of air cargo) is more downbeat than passenger flows, with recovery expected to be slow, and levels remaining below those recorded in 2019 until 2027.

ITS IMPACT ON HOUNSLOW COULD BE SIGNIFICANT

To consider the future economic impact of reduced activity at Heathrow we have developed three alternative scenarios. Our central scenario is the most plausible based on the forecasts and announcements from the sector. In addition to this we have developed a more optimistic upper scenario where recovery happens much quicker and a more pessimistic lower scenario where the recovery takes longer.

Under our central scenario we estimate workplace-based employment could fall by an estimated 1,770 jobs in 2021, relative to 2019 levels. However, **this masks a more significant fall in resident employment of 3,790 jobs.** These labour market impacts subsequently result in £189.5m of lost consumer expenditure in 2021 (which is equivalent to a 2.7% fall in total consumer expenditure in Hounslow in 2019).

Fig. 2. Hounslow workplace-based employment change vs resident employment change, 2020 to 2025



Source: Oxford Economics

The loss of workplace-based jobs in Hounslow impacts GVA[4] contributions to GDP. We estimate it would be some £174.6m lower in 2021 in our central scenario—equivalent to **a 24.8% reduction in Heathrow's total GVA impact on the Hounslow economy.**

[4] GVA measures the contribution to the economy of each individual producer, industry or sector in the United Kingdom. GDP is equal to GVA plus taxes, minus subsidises.

Under the upper scenario where passenger numbers and trade recover faster than in our central scenario, the adverse impact of reduced activity at Heathrow also peaks in 2021, with 1,530 workplace-based employment losses and 3,320 resident-based losses compared to 2019 levels. This would feed through into consumer expenditure, where we estimate spending would be over £166.1m lower in 2021 (again compared to 2019). Overall, Heathrow's GVA impact on Hounslow would fall by as much as 21.5% in 2021. However, under our upper scenario, job levels effectively recover to 2019 levels by 2023.

Under the more pessimistic lower scenario, we estimate workplace-based job losses in Hounslow could total 1,960 in 2021 and take beyond 2025 for employment levels to surpass 2019 levels, while resident employment losses would peak at an estimated 4,010 in 2021. In this scenario, consumer expenditure is estimated to be £200m lower in 2021, while Heathrow's GVA impact on Hounslow is estimated to fall by 27.2%.

Fig. 3. Hounslow resident-based employment impacts, 2020 to 2025

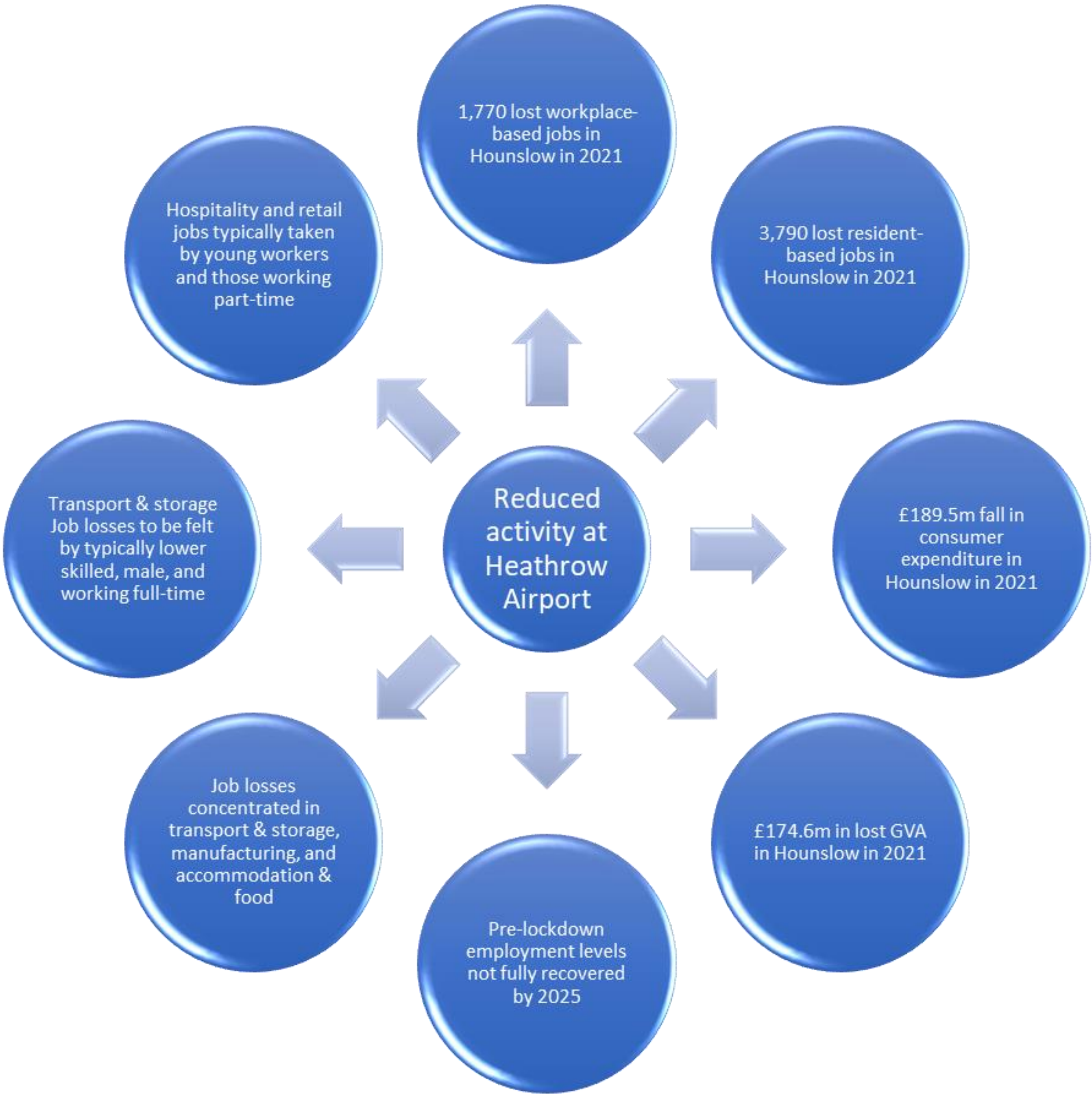
Hounslow resident based employment	2020	2021	2022	2023	2024	2025
Central	-2,460	-3,790	-1,380	-80	-60	-40
Upper	-2,150	-3,320	-360	-20	-20	-20
Lower	-2,790	-4,010	-1,580	-190	-90	-40

Source: Oxford Economics

The concentration of job losses in transport & storage, manufacturing, accommodation & food services and retail mean that the labour market impacts will likely be felt most by the lower skilled and the lower paid. Given the volume of transport & storage job estimated to be lost, a significant share of vulnerable jobs is likely to be taken by male, aged between 25 and 49 and working full-time. However, job losses in accommodation & food services as well as retail will have a disproportionate impact on local young workers and those working part-time.

Fig 4 provides a summary of the key findings from our central scenario.

Fig. 4. How reduced activity at Heathrow Airport could impact Hounslow



WHAT DOES THIS MEAN FOR HOUNSLOW OVER THE NEXT FIVE YEARS?

We have sought to isolate the impact of reduced activity at Heathrow Airport on the Hounslow economy and in so doing try to decouple it from the inherent impacts of the lockdown and measures to combat the coronavirus (which at the time of writing had contributed in a 20.4% fall in the UK economy in April 2020). In reality, they are interlinked and hence the impacts of reduced activity at Heathrow will be felt during a time of substantial economic downturn and challenges in the Hounslow economy. Therefore, our estimate of fewer resident-based jobs in 2021, compared to 2019 would be part of a much larger loss of jobs in the economy.

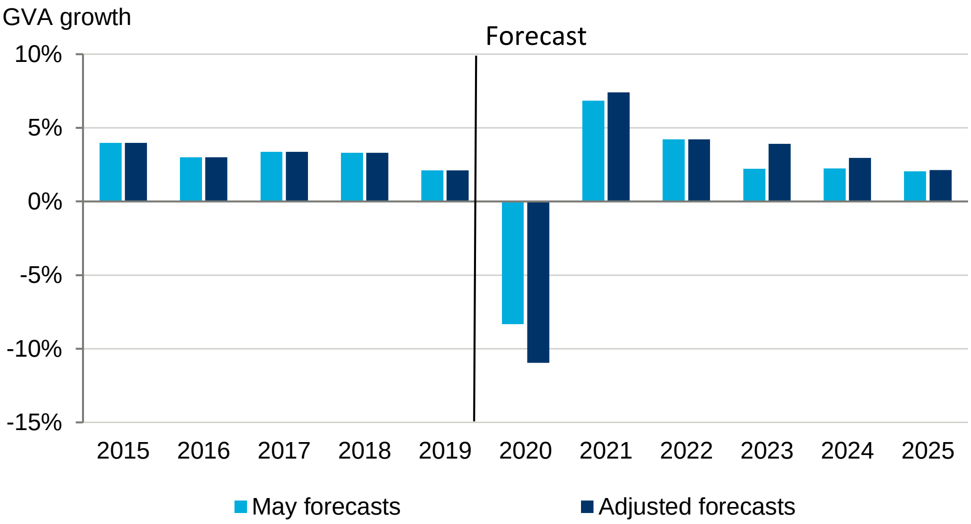
To capture this, we revisited our May baseline forecasts and revised them to account for our assessment of the potential impact of reduced activity at

11% decline
GVA contraction in 2020.

Transportation & storage and information & comms amongst the hardest hit.

Heathrow. Our adjusted baseline forecasts suggest that the Hounslow economy will contract by 11% in 2020, 2.6 percentage points more than in our May forecasts. However, alongside the deeper recession, we expect a stronger recovery in 2021 (7.4% compared to 6.8% previously) reflecting the gradual recovery in passenger flows at Heathrow.

Fig. 5. GVA growth, 2015 to 2025

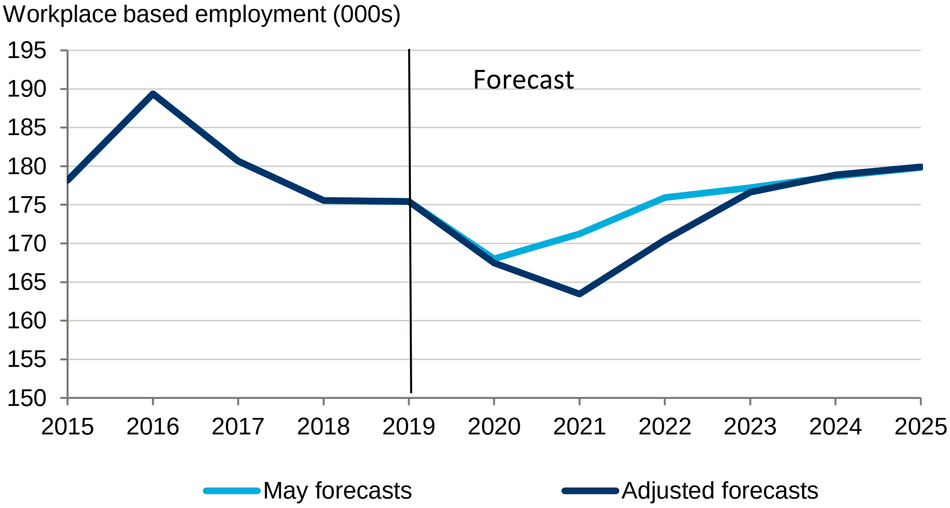


Source: Oxford Economics

Although we still forecast GVA levels in the Hounslow economy to reach nearly £20 bn by 2025, the economy is expected to return to 2019 levels in 2023 rather than in 2022 as previously estimated.

In terms of jobs, we forecast workplace-based employment in the borough to contract by 4.5%, or 8,000 jobs, in 2020 (slightly worse than the 4.2% and 7,400 jobs losses in our May forecasts). Our analysis of the impact of reduced activity at Heathrow suggested job levels would be kept artificially high due to the furlough scheme, and that losses could peak in 2021. This has led us to revise down workplace-based jobs in transport & storage in 2021. Consequently, we forecast workplace-based employment to recover to 2019 levels by 2023 rather than 2022 previously. However, we continue to project employment levels of just under 180,000 by 2025.

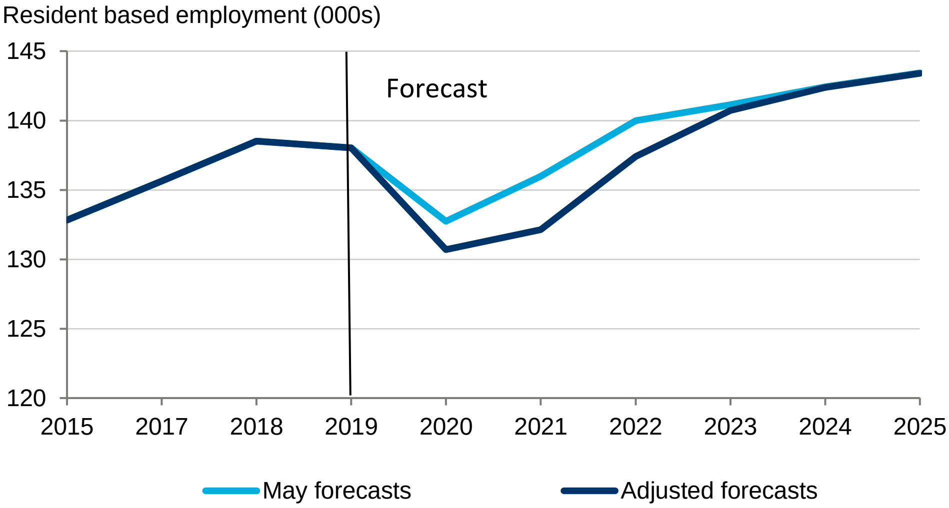
Fig. 6. Workplace based employment, 2015 to 2025



Source: Oxford Economics

Our downward revisions to job losses in both Hounslow and Hillingdon lead to a deeper contraction in Hounslow resident employment in 2020 and a slower recovery, albeit we expect resident employment levels to match those in our May forecasts by 2024 and beyond. Indeed, we forecast resident employment will fall by 7,300 in 2020 or by 5.3% (compared to 5,300 jobs losses and 3.8% in our May forecasts), as the lockdown smothers economic activity across the economy.

Fig. 7. Resident based employment, 2015 to 2025



Source: Oxford Economics

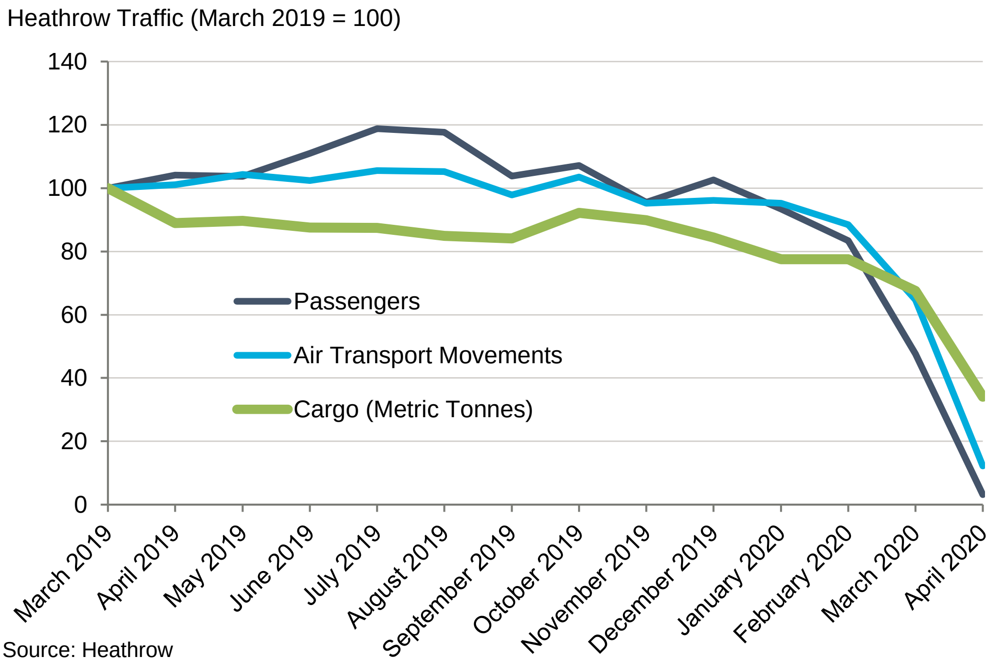
1. INTRODUCTION

1.1 CORONAVIRUS HAS HAD A DRAMATIC IMPACT ON HEATHROW

The coronavirus outbreak has had an unprecedented impact on national and local economies. As governments have introduced social distancing and lockdown measures to contain the spread of infection, all sectors of the economy have suffered. Amongst the most impacted has been air travel.

Data for April 2020 show that compared to the same month a year ago, passenger numbers at Heathrow Airport had fallen by 97%.[5] In addition, air transport movements were down over 87.9% and cargo movements by 61.7%. The dramatic stall in air travel will have significant implications for the hub airport where over 72,000 people work and which accounts for 94% of international passenger flows in and out of the UK[6].

Fig. 8. Heathrow traffic has fallen dramatically



Source: Heathrow

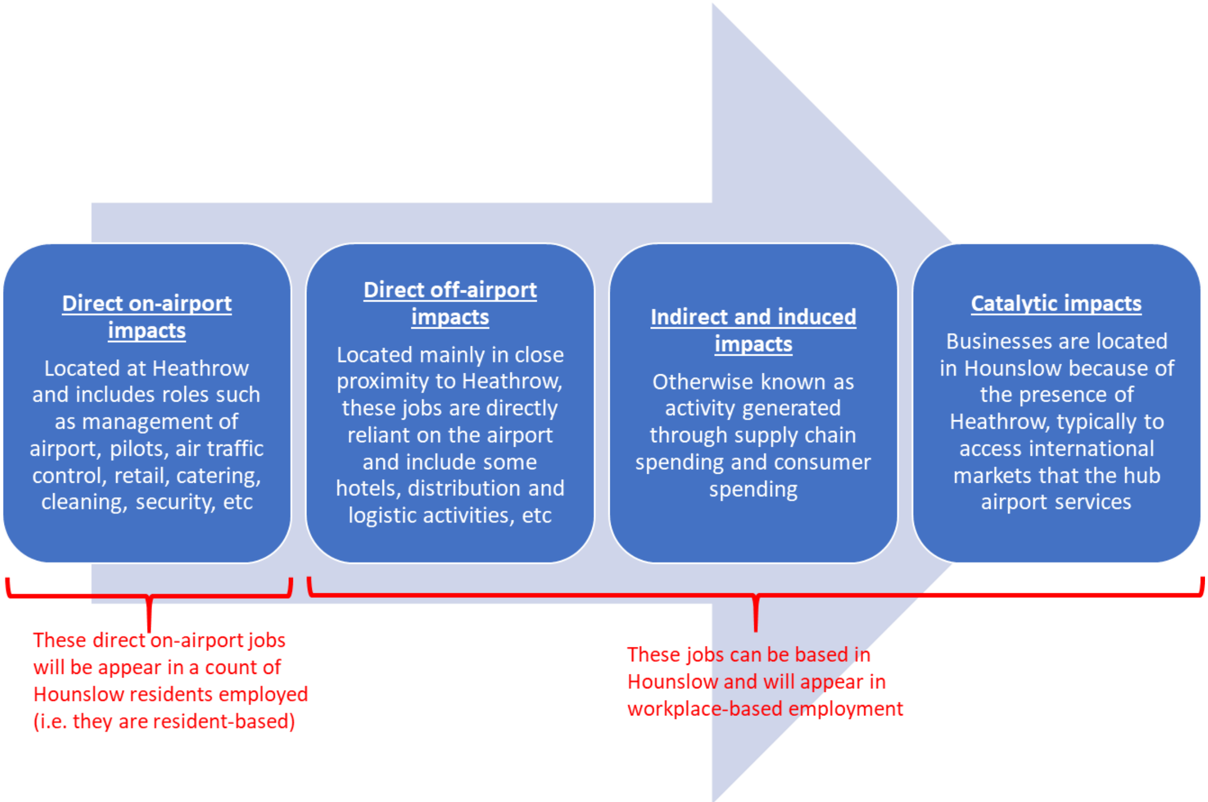
1.2 OBJECTIVES OF THIS PAPER

Heathrow Airport is a key source of employment for Hillingdon (where it is based), but also for neighbouring London Boroughs. The airport supports employment through four main channels of activity (shown in the Fig below). However, the dramatic fall in passenger numbers and cargo at the airport, threatens the security of many of the direct jobs located at Heathrow and surrounding it, as well as those in supply chains and subsequently those

[5] https://www.heathrow.com/company/investor-centre/reports/traffic-statistics
[6] Heathrow Airport Ltd

supported through the spending of wages. It could also impact on businesses that have located around the airport because of the international destinations it serves.

Fig. 9. The type of economic activity supported by Heathrow



Previous studies have shown that the operation and presence of Heathrow Airport provides substantial benefits to the London Borough of Hounslow, (hereafter referred to as Hounslow unless otherwise specified) economy. For example, Parsons Brinckerhoff and Berkeley Hanover Consulting (2013) reported that the Heathrow effect could have accounted for 36,100 jobs in the borough in 2010.

Understandably, given the importance of Heathrow to Hounslow and the scale of reduced activity at the airport, the Council are keen to understand the likely impacts on the local economy over the next 5 years.

This paper therefore focuses on the impacts to Hounslow, but in arriving at these estimates, we must also consider the direct jobs at Heathrow (referred to as on-airport jobs) in neighbouring Hillingdon. We also need to consider jobs that are directly reliant on Heathrow, but not based at the airport (referred to as off-airport jobs) in Hillingdon and in neighbouring economies.

Given we consider jobs in Hounslow and outside it, we use two different measures of employment in this paper, workplace-based and resident-based:

- **Workplaced-based employment** is a count of jobs that occur in Hounslow. These jobs don't necessarily need to be taken by Hounslow residents, they can be filled by labour commuting in from elsewhere. They include direct off-airport employment, indirect and induced employment and catalytic employment (see Fig 6), and all contribute to Hounslow's GVA; and

- **Resident-based employment** is a count of jobs taken by Hounslow residents. These employed residents don't need to be working in Hounslow, they just need to be employed and live there. We need to use this measure to capture the impacts of Hounslow residents working at Heathrow in neighbouring Hillingdon (i.e. direct on-airport jobs).

It is outside the scope of this study to undertake a comprehensive assessment of the local economic impact of Heathrow on the Hounslow economy, pre-coronavirus. We therefore draw on existing studies on the impact of Heathrow and recently published data to estimate the current scale of impacts.

Throughout the paper we isolate the impact of reduced activity at Heathrow Airport on the Hounslow economy. In other words, we try to decouple it from the inherent impacts of the lockdown and measures to combat the coronavirus (which at the time of writing had contributed in a 20.4% fall in the UK economy in April 2020).

Finally, given the level of uncertainty facing the economy, aviation and Heathrow, we have developed three recovery scenarios for the period 2020 to 2025 (a central, upper and lower scenario). When presenting the impacts of these scenarios, we compare to 2019 estimates.

1.3 REPORT STRUCTURE

The report takes the following structure:

- **Section 2** sets out to estimate the economic importance of Heathrow to the Hounslow economy pre-lockdown. This is our 2019 estimate against which we can consider the impact of reduced activity;
- **Section 3** then considers the current impacts of lockdown on Heathrow and how it might recover; and
- **Section 4** presents our estimates of the impact of reduced activity at Heathrow under three separate scenarios.

2. UNDERSTANDING HEATHROW'S CONTRIBUTION TO THE HOUNSLOW ECONOMY

2.1 INTRODUCTION

This section establishes the economic contribution that Heathrow made to the Hounslow economy in 2019 (in other words, its impact pre-lockdown). With that understanding we can then estimate how reduced activity from 2020 onwards might impact the local economy. We start by explaining our approach to estimate the 2019 impacts.

2.2 THE ECONOMIC CONTRIBUTION OF HEATHROW PRE-LOCKDOWN

To fully understand how the coronavirus and recovery at Heathrow Airport will influence the Hounslow economy, we first need to understand:

- **Direct on-airport activity:** the scale of activity (employment, GVA[7] contributions to GDP and wages) at Heathrow Airport, commonly referred to as direct on-airport activity, and how much of this is taken by residents of the local borough.
- **Direct off-airport activity:** we then need to understand the scale of direct off-airport activity (employment, GVA and wages) in Hounslow.
- **Indirect and induced impacts:** using a bespoke economic impact model developed for this study we then estimate the indirect and induced effects of this activity. Indirect impacts are the economic benefit and employment supported by the supply chain of those companies operating directly on-airport and off-airport, as a result of the procurement of goods and services. **Induced impacts** are the wider economic benefits that arise when those in either the direct on-airport, direct off-airport or supply chain spend their earnings, for example in local retail establishments.
- **Catalytic impacts:** finally, we will discuss the catalytic impacts that arise from the presence of Heathrow Airport and the access it offers to international markets.

2.3 DIRECT ON-AIRPORT ACTIVITY

Despite their being previous analysis on the impact of Heathrow Airport, there does not seem to be a commonly accepted recent measurement of the jobs, wages and GVA sustained in the Hounslow economy by its operation. Using a mix of previous estimates and published Business Register & Employment Survey (BRES) employment data for selected sectors in local authority areas in

[7] GVA measures the contribution to the economy of each individual producer, industry or sector in the United Kingdom. GDP is equal to GVA plus taxes, minus subsidises.

72,100

Estimated on-airport employees at Heathrow Airport in 2019.

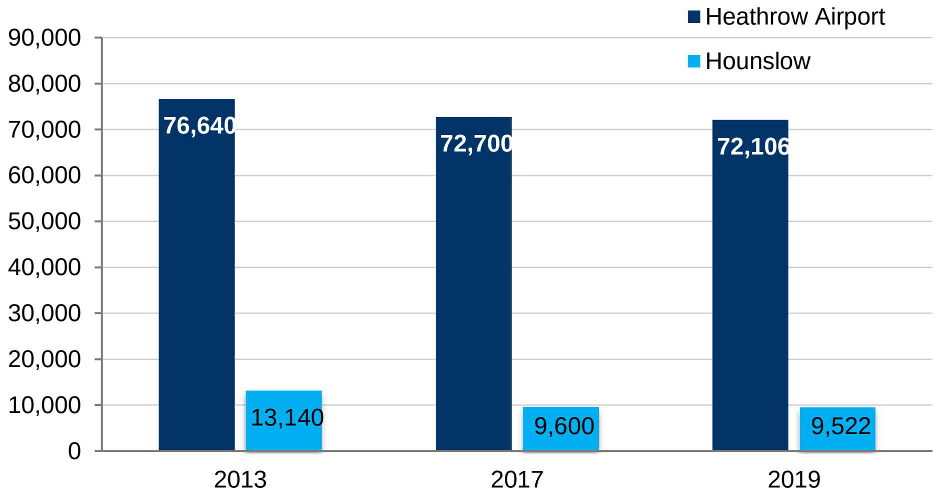
With 13.2% 9,600 travelling from the London Borough of Hounslow.

and around the airport, including the London Borough of Hillingdon and Hounslow, we have estimated the scale of economic benefits for 2019.

Heathrow's "Surface Access Proposal" report (2019)[8] published on-airport employment estimates for 2013 and 2017. Direct on-airport employment (described as colleagues) in 2017 was reported to be 72,700 in the report. Of which, approximately 9,600 employees came from Hounslow (equivalent to 13.2% of all direct on-airport employment).

Given recent employment trends in the London Borough of Hillingdon, as published by BRES, we estimate on-airport employment at Heathrow Airport is likely to have fallen slightly to 72,100 in 2019. In the absence of any up to date data, we assume the share of employment taken by Hounslow residents remains unchanged from 2017 to 2019—and hence we estimate a slight fall in on-airport employment filled by Hounslow residents to just over 9,500.

Fig. 10. Direct on-airport employment at Heathrow Airport and the number taken by Hounslow residents (selected years)



Source: Heathrow's SAP study (2019) & Taking Britain Further (2014) / ONS / Oxford Economics

Fig. 11 below provides a breakdown of the on-airport employment by job type.[9] Air cabin crew represent the largest group with nearly 1 in every 5 on-airport employees at Heathrow Airport, while passenger services, sales and clerical staff are close behind with 17.3%. Relatively well-paid employment in management, pilots /ATC / flights operation and information technology account for 15.1% of all direct on-airport employment in Heathrow Airport.

However, an analysis of employment by Hounslow residents reveals they tend to be in lower paid roles. Less than 10% are in management, pilots /ATC / flights operation and information technology. Instead, over half are in

[8] Surface Access Proposal: travelling to and from the airport. June 2019. We will refer to this report as Heathrow's SAP study hereafter.

[9] The information provided in the table is derived using a mix of published data, from Heathrow's Taking Britain Further (2014) report, and Oxford Economics modelling assumptions.

passenger services, sales and clerical staff, catering and retail, and apron, ramp, cargo, drivers, baggage staff.

Further analysis shows that almost a quarter of on-airport catering & retail employment in Heathrow Airport is filled by Hounslow residents. While over a fifth of on-airport cleaning & housekeeping roles are fulfilled by residents of Hounslow—see Fig. 11 below.

Fig. 11. Direct on-airport employment by type of job, 2019

Job types	Heathrow Airport	Hounslow	Hounslow % of Heathrow Airport
Management / professional: Airport / airline specific	1,593	168	10.5%
Management / professional: general	4,662	372	8.0%
Passenger services, sales and clerical staff	12,476	1,996	16.0%
Air Cabin Crew	14,361	502	3.5%
Pilots / ATC / Flights Operations	3,725	270	7.3%
Information technology	875	113	13.0%
Maintenance tradesman & other skilled workers	4,996	486	9.7%
Apron, ramp, cargo, drivers, baggage staff	7,510	1,278	17.0%
Catering and retail	7,472	1,803	24.1%
Cleaning and Housekeeping	1,468	334	22.8%
Customs, immigration, police and fire	1,699	299	17.6%
Security, passenger search, access control	6,630	1,135	17.1%
Other	4,638	765	16.5%
Total	**72,106**	**9,522**	**13.2%**

Source: Heathrow's Taking Britain Further (2014) / Oxford Economics

Fig. 12 below shows a breakdown of direct on-airport employment at Heathrow Airport by broad sectors, along with corresponding average sectoral weekly wages in London.[10] In reality, employment in information & communication is likely to fall within the transportation & storage sector, as are the administrative & support services jobs as they are located at the airport. However, for the purpose of considering relative wages, we have split these out from the transport sector.

Over 70%

Of direct on-airport employment by Hounslow residents is in transportation & storage.

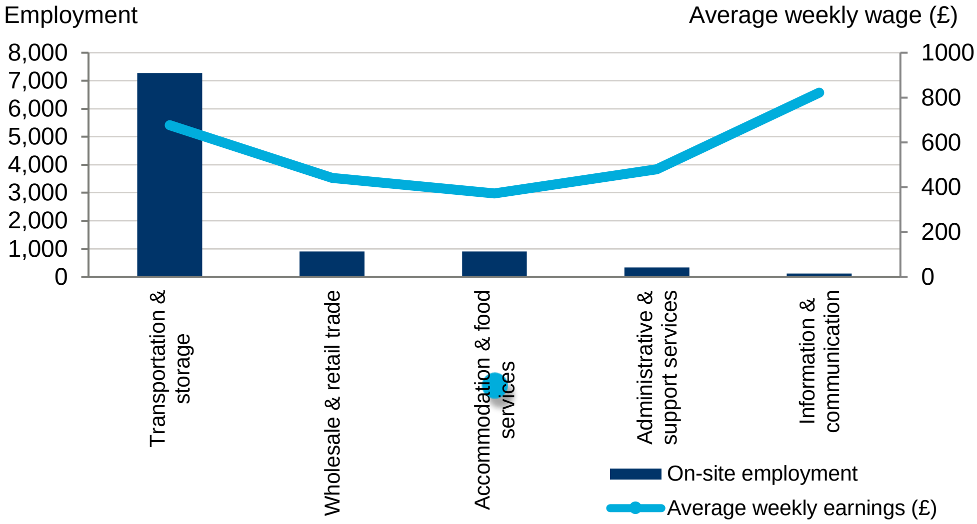
Which is slightly better paid relative to the London average.

More than 70% of jobs at the airport taken by Hounslow residents are within the transport & storage sector—which at £677 per week is typically better paid than the average resident based weekly earnings in Hounslow (£636), but below the average weekly workplace-based earnings of £727.

However, over a fifth of on-airport employment filled by Hounslow residents are in relatively less-paid sectors including wholesale & retail trade, accommodation & food and administrative & support services.

[10] The job types, as presented in the above table, are mapped to broad industrial sectors and aggregated.

Fig. 12. Direct on-airport employment by Hounslow residents and average weekly earnings, by sector, 2019



Source: Heathrow report: Taking Britain Further / Oxford Economics / ASHE (2019)

2.4 DIRECT OFF-AIRPORT ACTIVITY

In addition, to the above, there is a pool of businesses and workers based in Hounslow that are directly sustained by the presence of Heathrow Airport. These include hotels, cargo / freight services, airline services, car parking, and couriers which are commonly referred to as direct off-airport activity.

Over 9,000

Direct off-airport employment in five local areas in 2019.

Of which more than 1,500 supported by businesses in Hounslow.

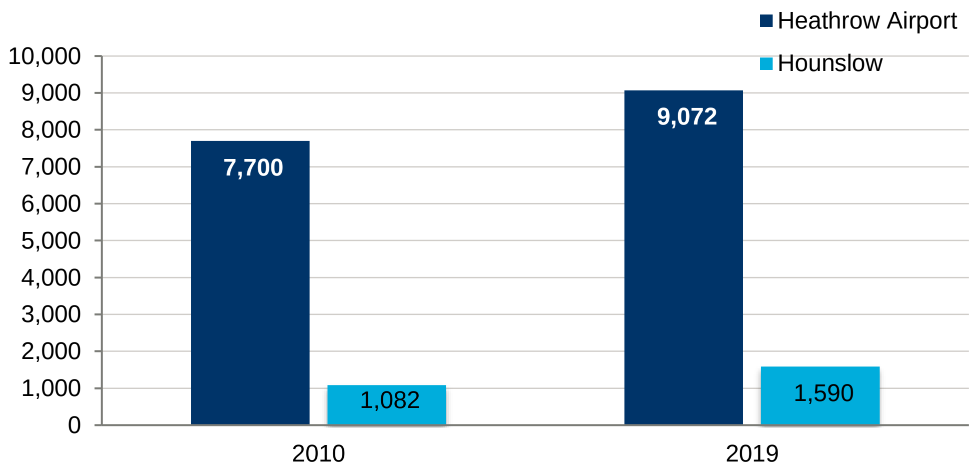
Optimal Economics in their 2011 paper estimated direct off-airport activity in 2010 in the London Boroughs of Ealing, Hillingdon and Hounslow, as well as Spelthorne and Slough, using a survey of local businesses. This was subsequently used in the Parsons Brinckerhoff (2014) paper. Given it is outside the scope of this work to commission a new survey of local businesses, we too have used the 2010 estimate as a starting point. We push this forward using growth rates from published BRES data. [11]

We estimate that direct off-airport employment in the five local authority areas (listed above) reached just over 9,000 in 2019, up from 7,700 in 2010.[12] Of this, we estimate that 17.5% is accounted for by Hounslow businesses, equivalent to just over 1,500 employees. However, this could be an underestimate (see the call out box overleaf).

[11] Using ONS BRES employment data, we calculate the share of Hounslow employment of all five boroughs (Ealing, Hillingdon, Hounslow, Slough and Spelthorne) in industries closely associated with off-airport activity. This share is applied to the direct off-airport employment in Heathrow Airport, creating a proxy of direct off-airport employment supported by Hounslow businesses. We then push forward the 2010 estimate from Parsons Brinckerhoff using the growth in the proxy series.

[12] Parsons Brinckerhoff / Berkeley Hanover (2013) estimate 7,700 direct off-airport employment for five London Boroughs: Ealing, Hillingdon, Hounslow, Slough and Spelthorne. Using detailed industry employment trends published by BRES for these London boroughs, the 2010 point is grown forward to 2019.

Fig. 13. Direct off-airport employment



Source: Parsons Brinckerhoff / ONS BRES / Heathrow Passenger Statistics / Oxford Economics

DIRECT OFF-AIRPORT EMPLOYMENT SUPPORTED BY HOUNSLOW BUSINESSES

According to Parsons Brinckerhoff (2014), the London Borough of Hounslow supported 1,082 direct off-airport jobs in 2010. Their estimate is derived from a paper by Optimal Economics (2011). Parsons Brinckerhoff note that off-airport estimates could be larger and are open to subjectivity. Following a high-level analysis of BRES data for the London Borough of Hounslow there is evidence that the number of direct off-airport jobs could have been underestimated in the past. We analysed BRES data for industries that are likely to be closely associated with direct off-airport activity:

- Hotels and similar accommodation;
- Freight transport by road;
- Freight air transport;
- Operation of warehousing and storage facilities for air transport activities (of division 51);
- Operation of warehousing and storage facilities for land transport activities (of division 49);
- Service activities incidental to air transportation;
- Cargo handling for air transport activities (of division 51); and
- Other transportation support activities.

These industries supported over 5,000 workplace-based jobs in Hounslow in 2010 – five times the figure estimated by Parsons and Brinkerhoff (2014). It is outside the scope of this study to explore what share of current employment levels in these sectors (of which we estimate there are 7,600 jobs) should be considered direct off-airport and hence we have anchored our estimate to those in the Parsons Brinckerhoff (2014) report and have grown them forward using annual employment growth from BRES. However, it is worth noting that in doing so it could be under-estimating direct off-airport employment supported by Hounslow.

Further analysis of BRES employment data highlights the relative importance of industries in Hounslow that are closely associated with the activities of Heathrow Airport. We consider the Location Quotients (LQs) in the local area—a tool that measures the degree of specialisation in a given area relative to a benchmark. A value greater than 1 indicates that Hounslow has an economic advantage in a particular industry compared to London as a whole. For the analysis we focus on industries with at least 200 employees and present the top 10 five-industries' LQs below (Fig. 14).

The table shows niche specialism in industries closely related to activities of Heathrow Airport including scheduled passenger air transport, other transportation support activities and other passenger land transport n.e.c. Consequently, by using the direct off-airport estimates from 2010 / 2013 we could be underestimating the importance of Heathrow to the Hounslow economy.

Fig. 14. Hounslow employment and LQs by industry, 2018

	Employment (2018)	Location Quotient
Manufacture of other special-purpose machinery nec	200	26.5
Scheduled passenger air transport	26,000	24.0
Television programming and broadcasting activities	8,000	17.7
Satellite telecommunications activities	300	14.2
Manufacture of beer	400	10.6
Extraction of crude petroleum	500	9.5
Other transportation support activities	2,500	6.4
Other passenger land transport nec	1,750	5.8
Wholesale of sugar and chocolate and sugar confectionery	250	5.5
Repair of communication equipment	200	5.3
Wholesale of dairy products, eggs and edible oils and fats	225	5.0

Source: ONS BRES

Of course, some of this activity is likely to be part of the supply chain for businesses operating directly on-airport and those directly off-airport. Therefore, a proportion of these jobs will be accounted for in our indirect estimates discussed in the next sub-section.

2.5 INDIRECT AND INDUCED ACTIVITY

The direct activity sustained by Hounslow residents and businesses will have sustained further rounds of activity in Hounslow through it's supply chain and consumer spending. In addition, direct on-airport and off-airport activity based in Hillingdon, Ealing, Slough and Spelthorne will all have a supply chain impact on Hounslow and therefore also feed through to consumer spending. We have developed an economic impact model to estimate the indirect and induced impacts of this direct (on- and off-airport) jobs, as presented in the preceding section, and the economic activity on the Hounslow economy.

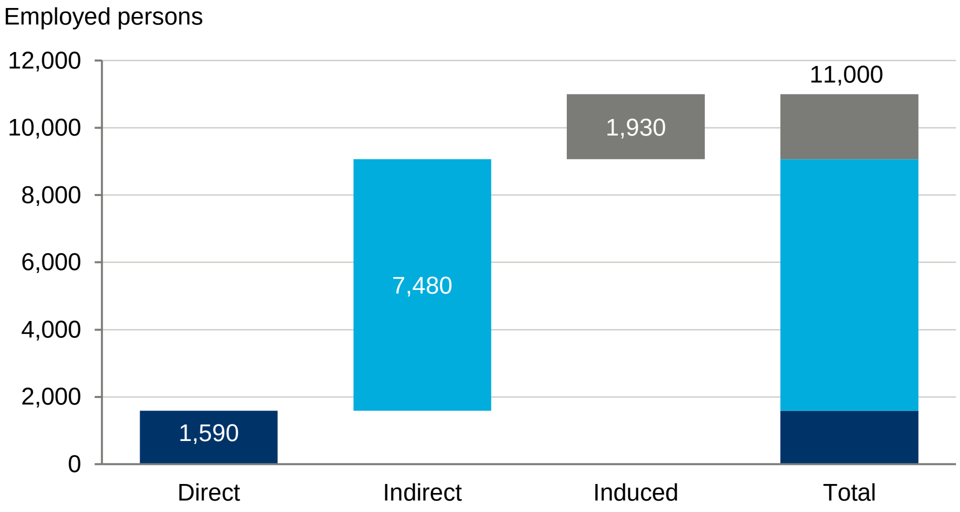
The supply chain (or indirect) impacts arising from the direct activity generate and sustain multiple rounds of spending including the initial round of spending in the supply chain, but also by the suppliers' suppliers, and so on. In addition, there are induced impacts as those employed directly (on- and off-airport) and indirectly spend a proportion of their income in the economy; supporting further employment in sectors such as retail and personal services.

11,000

Workplace based jobs supported by businesses in Hounslow in 2019 as a result of activity at Heathrow Airport.

On a workplace-based measure of employment we estimate that the airport supported a further 7,480 indirect jobs in the Hounslow economy in 2019. This level of employment was associated with an estimated £468.4 million (constant prices) in GVA. It also supported a further 1,930 induced jobs in the borough, generating £123.6 million (in constant prices) in GVA. As a whole, we therefore estimate that 11,000 workplace-based jobs (direct, indirect and induced) in Hounslow were supported by Heathrow in 2019, with associated GVA contributions to GDP of £703.6 million (constant prices).

Fig. 15. Employment supported in Hounslow, 2019



Source: Oxford Economics

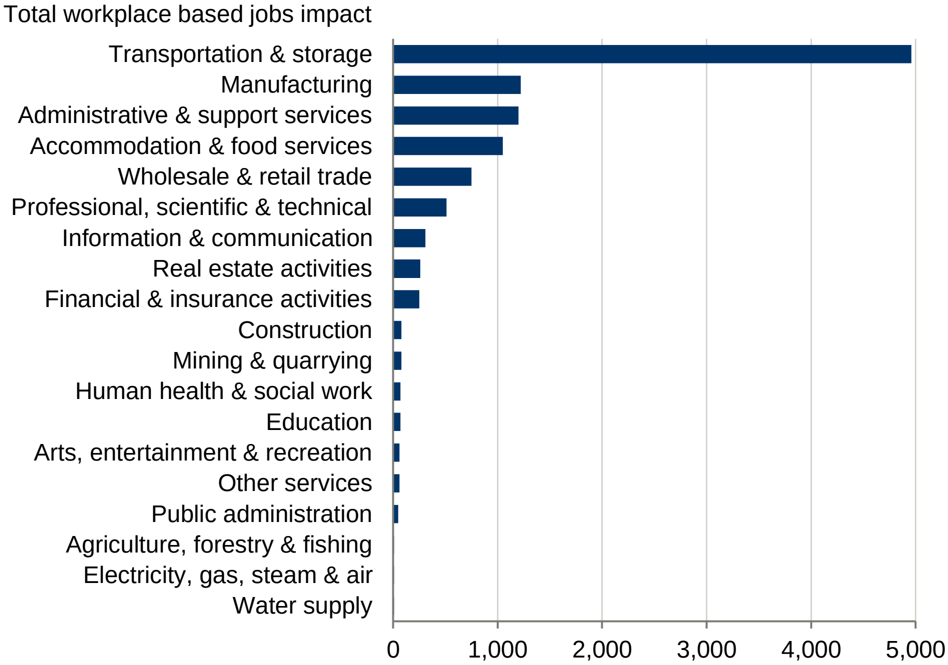
Over 45%

Of total (direct, indirect and induced) workplace based jobs in Hounslow estimated to be in transportation & storage.

Through the numerous rounds of supply chain and consumer spending, all sectors in the economy experience some degree of benefit—see Fig. 16. A large bulk of these jobs however are in transport & storage (45%). Manufacturing (11.1%), administrative & support services (10.9%) and accommodation & food services (9.5%) are the next largest.

Unfortunately, only a small share of workplace-based jobs in Hounslow that were sustained by Heathrow activity in 2019 are estimated to be within high-value added sectors. The two largest professional, scientific & technical activities and information & communication accounted for only 4.6% and 2.8% of total jobs respectively.

Fig. 16. Direct (off-airport only), indirect and induced job impacts, Hounslow, 2019



Source: Oxford Economics

However, these workplace-based employment totals are misleading as they don't include Hounslow residents who commute to Hillingdon to fill direct on-airport jobs. Given the scale of this flow of residents, the more meaningful measure in this study is resident employment. **We estimate that just over 16,000 Hounslow residents were employed as a result of activity at Heathrow Airport; through the direct, indirect and induced channels of impact.** This is equivalent to 11.6% of the borough's resident employment level.

More than 16,000

Hounslow residents were employed as a result of activity at Heathrow (excluding catalytic activity).

Given we estimate that the number of Hounslow residents working at the airport is just over 9,500 in 2019, approximately 6,540 residents are employed off-airport as a result of activity at Heathrow Airport.

2.6 CATALYTIC ACTIVITY

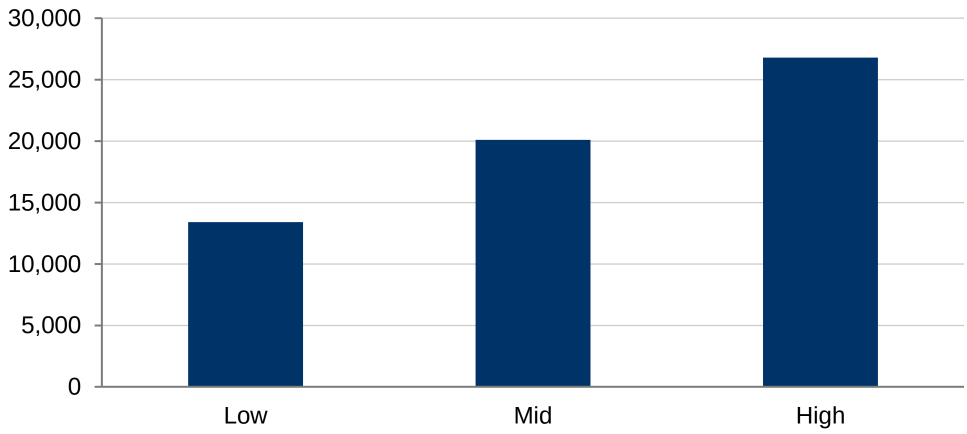
In addition to the above, Heathrow also provides catalytic benefits to the Hounslow economy. In other words, businesses will be attracted to the borough given its proximity and ties to Heathrow Airport but will have no links, either directly or indirectly, to the airport itself. Instead these businesses use the connectivity of a major hub airport to support their own business interests.

To provide a comprehensive and up to date estimate of the scale of catalytic impacts, we would need to carry out a detailed survey of local businesses. Unfortunately, that is outside the scope of this work.

Existing surveys do suggest Heathrow has created a pull factor for the local economy. The Sectors Research (2015)[13] for example, surveyed 200 businesses across the borough, with a focus on sole traders, micro and small businesses and on Hounslow's key sectors, including transport & logistics, media & broadcasting, ICT & digital media, professional & business services and advanced manufacturing. It found that the borough's physical location was the most frequently reported factor as to why firms had set up within the borough – it was reported by approximately a third of companies. Of these firms, around half identified the borough's proximity to Heathrow Airport as being important. While 75% of firms in the transport & logistics sector stated that they were located in the borough because of its proximity to Heathrow Airport and/or other transport links including the M25.

In addition, Parsons Brinckerhoff (2014) estimated that the catalytic employment in Hounslow could have ranged between 13,395 to 26,790 in 2010 (mid estimate of 20,093). Given commuting patterns, not all of these jobs will be taken by Hounslow residents, however it is potentially a significantly large source of additional jobs in the local economy that owe their location to Heathrow.

Fig. 17. Parsons Brinckerhoff catalytic employment in Hounslow, 2010



Source: Parsons Brinckerhoff (2014)

2.7 SUMMARY

Our analysis shows that, before the onset of coronavirus and the subsequent lockdown, Heathrow Airport provided a considerable economic contribution to the Hounslow economy. We summarise our findings in Fig 18.

[13] London Borough of Hounslow: Sectors Research (2015)

Fig. 18. Heathrow's economic contribution to Hounslow in 2019

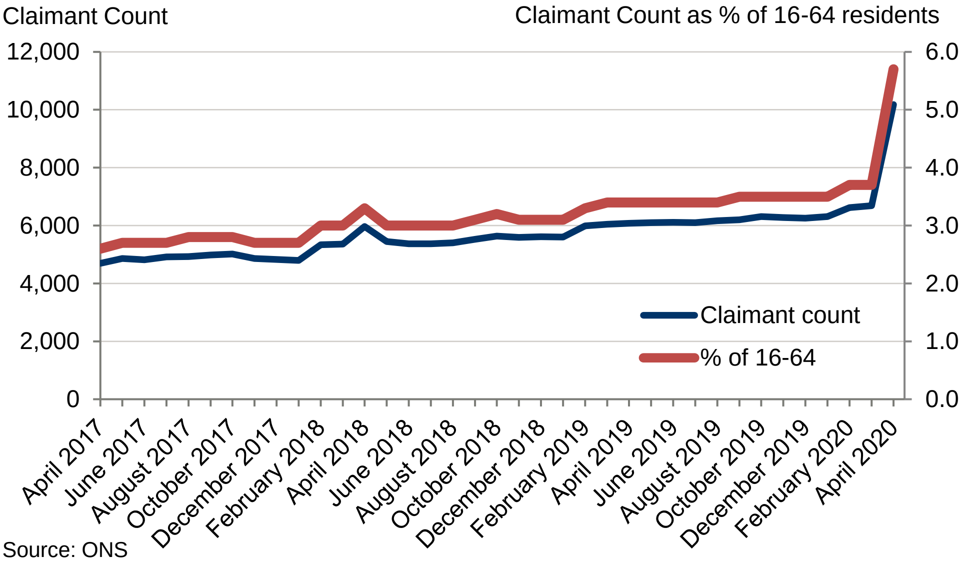
3. THE IMPACT OF LOCKDOWN ON HEATHROW

3.1 THE IMMEDIATE IMPACT ON THE LABOUR MARKET

The fall in air passenger flows and cargo activity at Heathrow has not led to a significant fall in employment at the airport or in the surrounding area given the effects of the Furlough Scheme. At the time of writing, almost 9 million workers, or more than a quarter of the UK's workforce, are protected by the government's Furlough Scheme.[14] The scheme, which aims to moderate the impacts of coronavirus and the subsequent lockdown, protects 80% of employees' monthly salary up to £2,500; and has been extended until the end of October 2020. In addition, the government is supporting the self-employed under a different programme.

Although there has been a jump in unemployment in Hounslow, claimant unemployment as a share of the working age residents only rose to 5.7% in April 2020. With the Furlough Scheme extended to October 2020, albeit with lower levels of financial support, the immediate labour market impacts of lockdown and recovery are likely to be notably mitigated.

Fig. 19. Claimant Count unemployment in Hounslow



Source: ONS

Consequently, the key question is: what will recovery at Heathrow look like and how will that impact the local economy once the Furlough Scheme has been removed?

[14] https://www.bbc.co.uk/news/business-52977098. Date accessed: 9th June 2020

3.2 WHAT WILL RECOVERY IN THE AVIATION SECTOR LOOK LIKE?

3.2.1 The outlook for air passenger flows and cargo

46.5%

The fall in global air passenger numbers in 2020. Global air passenger numbers not expected to recover 2019 levels until 2022

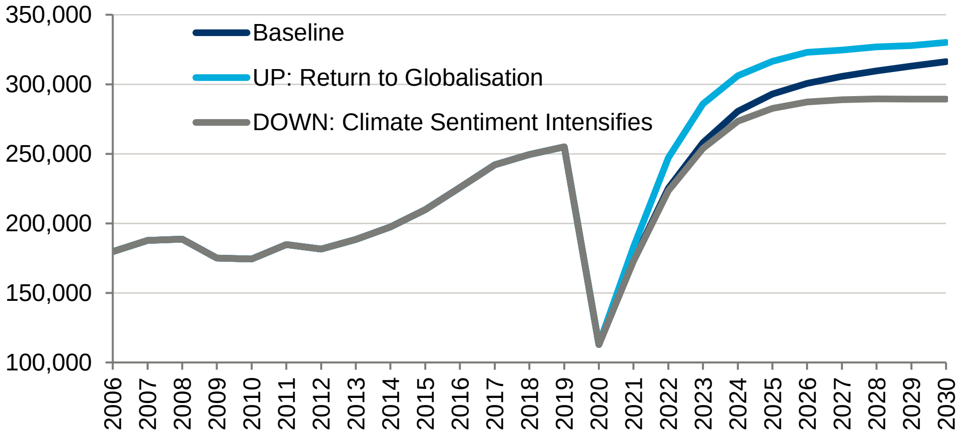
Tourism Economics and IATA (TE / IATA) forecast that the number of global air passenger journeys will grow by 3.7% per year over the next 20 years. Consequently, by 2039 the number of passenger journeys will be more than double those made in 2019. However, these forecasts are subject to uncertainty with risks weighing on the downside, particularly in the short term.

It is expected that passenger numbers will fall by 46.5% in 2020, followed by a strong bounce back in 2021. However, passenger numbers are not expected to surpass 2019 levels until 2022. Even under a more downbeat scenario, global passenger flows are forecast to recover by 2022. From 2019 to 2025, TE / IATA's baseline forecast suggest that global air passenger numbers will grow by 3.7% per annum.

The British air passenger market is forecast to grow at an average annual rate of 2.3% between 2019 and 2025. This compares to a per annum rate of 5.2% over the five years to 2019. Current forecasts suggest a return to 2019 levels by 2023, though this could be pushed out one year under TE / IATA's more downbeat scenario.

Fig. 20. UK air passenger flows, 2006 to 2030

Passeners (000s)



Source: Tourism Economics / IATA

Despite the expectation of a recovery in passenger numbers over the coming three years, major aviation businesses have announced their intention to cut their workforces. British Airways (BA)[15], Virgin[16] and EasyJet[17] have all suggested they might cut their workforce by around 30%. It is therefore

[15] https://www.ft.com/content/abc6355a-3801-4e32-a992-f55e475d4454
[16] https://www.bbc.co.uk/news/business-52542038
[17] https://www.theguardian.com/business/2020/may/28/easyjet-plans-to-cut-up-to-30-per-cent-of-staff-because-of-covid-19-crisis

14.8%

The forecast fall in the value of UK non-energy goods exports in 2020

Trade in exports and imports to the UK not expected to surpass 2019 levels until 2027.

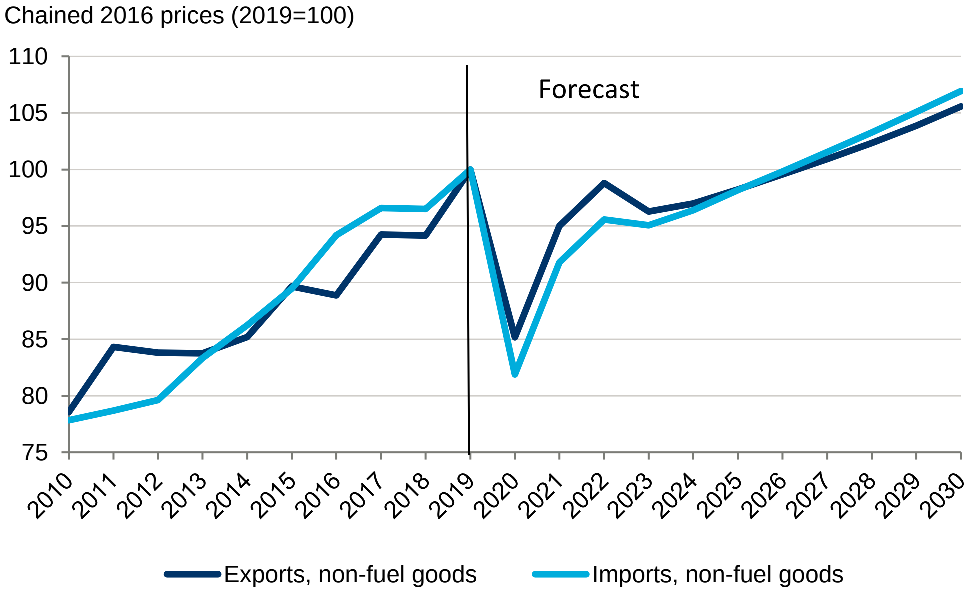
reasonable to assume that once the Furlough Scheme has been removed (or even as the financial support changes) there could be job losses at Heathrow in the businesses that operate directly at the airport and/or in the direct off-airport activity.

Based on the announcements by airlines we might expect a significant cut to airline employees. Likewise, if passenger numbers are expected to be less than half those in 2019, it is also reasonable to expect a substantial loss of employment in retail, catering, hotel and cleaning jobs at the airport. However, management and IT related jobs might be relatively more insulated as they are less passenger facing.

Jobs in cargo, distribution and storage are also vulnerable given a significant volume of air cargo travels through passenger planes. In addition, our baseline outlook for UK trade in non-energy goods is more downbeat than passenger flows. Although not a direct measure of air cargo movements, it provides an indication of how exports and imports of goods might suffer in 2020, and their subsequent recovery.

In 2020, we forecast a 14.8% decline in the value of UK exports of non-energy goods and a 18.1% fall in the value of imports. Recovery in the value of non-energy goods exports and imports to the UK is expected to be slow, with levels remaining below those recorded in 2019 until 2027.

Fig. 21. Volume of exports and imports of non-energy goods to the UK



Source: Oxford Economics

Our upper and lower scenarios for UK trade show a similar pattern, with the volume of exports and imports returning to 2019 levels in 2027 (albeit slightly sooner or later in the year). Given this, it is reasonable to assume that businesses linked to cargo, distribution and storage could experience a more prolonged reduction in employment compared to other activities in and around Heathrow Airport, over the recovery period.

3.3 LOCAL JOBS ARE VULNERABLE

Recovery of passenger numbers at Heathrow Airport is likely to take until 2023, at least. However, air cargo volumes could be marginally lower than 2019 levels for a significantly longer period. Lower paid jobs at the airport are arguably more vulnerable in the short term to the fall in passenger numbers. Given that Hounslow residents tend to fill larger proportions of these jobs, and that the borough has a large distribution and storage sector, the adverse impact of reduced activity at Heathrow Airport could be more damaging to Hounslow than in other locations (though we have not analysed the impact across London boroughs).

4. THE ECONOMIC IMPACT OF REDUCED ACTIVITY

4.1 OUR MODELLING APPROACH

The future of Heathrow Airport is uncertain and subject to changes in UK Government policy, as well as national travel policies around the world. It will also be influenced by general perceptions on the safety and need to travel, changes in air travel costs and changes in working habits (e.g. more remote working and adoption of IT). The full impact of these issues will be revealed in due course, but to model the impact of reduced activity at Heathrow Airport, we have made a number of assumptions that drive three alternative recovery scenarios and hence impact direct jobs both on- and off-airport over the next five years.

As mentioned in section 3.2.1, major airlines have announced their intentions to reduce workforce numbers by around 30%. However, it is not clear how exposed Heathrow Airport is to these reductions. The fact that it is a hub airport and there have been reports that London Gatwick could suffer more, it is reasonable to expect that Heathrow could be somewhat insulated from the full scale of these cuts. As a result, in our central scenario we assume a 25% reduction (from 2019 estimates) in the following roles in 2020:

- Passenger services, sales and clerical staff;
- Air Cabin Crew;
- Pilots / ATC / Flights Operations; and
- Apron, ramp, cargo, drivers, baggage staff.

In our downside scenario we change our assumption to a 30% reduction, while the upper scenario factors in a 20% reduction. There is no suggestion of when these cuts will happen and as such, we assume all of them take place in 2020.

Beyond 2020, employment in these roles has been grown forward using TE / IATA forecasts on passenger flows. In doing so it allows employment in roles associated with airlines to react to the gradual recovery in air passenger travel that is expected across the UK.

Given other roles at the airport such as catering & retail relate more to the volume of passengers flowing through the airport, we link employment in these roles to the change in TE / IATA's passenger flow forecasts. We use TE / IATA's baseline outlook on passenger flows to drive our central scenario, while the upper and downside scenarios feed into our alternative futures.

We assume the rest of the on-airport jobs are relatively more insulated from cuts by the airlines and/ or by reduced passenger numbers. However, they are still likely to be vulnerable to such a large drop in activity at the airport. We therefore link employment growth in our central scenario to Oxford Economics' baseline forecasts for air transport employment in the London Borough of Hillingdon. The roles affected include:

- Management / professional: Airport / airline specific;

- Management / professional: general;
- Cleaning and Housekeeping;
- Customs, immigration, police and fire;
- Security, passenger search, access control; and
- Other.

We use Oxford Economics' upside and downside scenario forecasts to drive our two alternative upper and lower recovery scenarios.

For direct off-airport employment we use Oxford Economics' sectoral forecasts for the transport & storage sector to push forward jobs closely linked to this broad sector, and use the growth profile for accommodation & food services to inform our forecasts for the hospitality industry. Once again, we use Oxford Economics' upside and downside forecasts to drive our faster and more prolonged recovery scenario.

14,800

Direct on-airport job losses in 2020.

Equivalent to one in every five jobs at Heathrow.

4.2 DIRECT IMPACTS

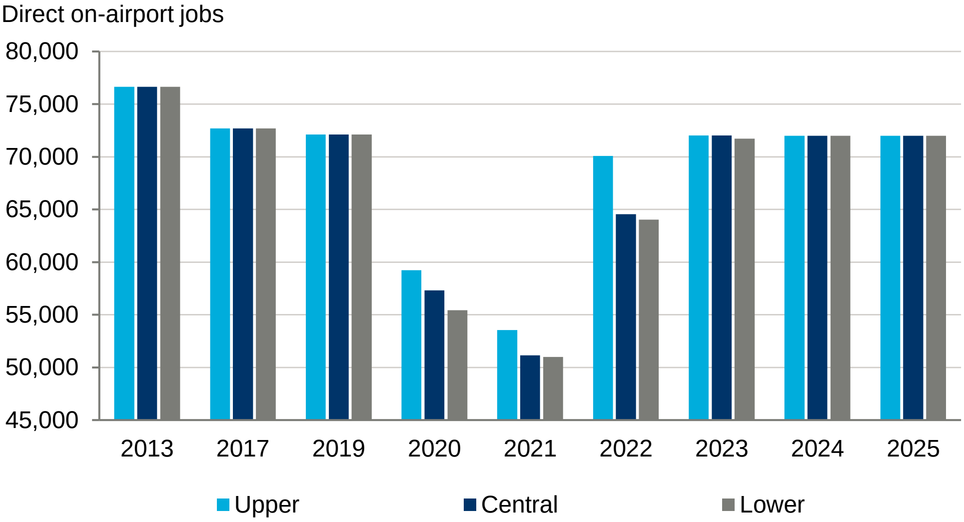
4.2.1 On-airport

In our central scenario, direct on-airport employment at Heathrow Airport will fall by 20.5% by the end of 2020. This is the equivalent to a loss of just under 14,800 workplace-based jobs in Hillingdon[18]. Clearly this would have been substantially higher if the Furlough Scheme had not been in place to safeguard jobs.

In 2021, with the full removal of the Furlough Scheme, we estimate on-airport employment levels will be almost 29.1%, or nearly 21,000, less than 2019 levels. However, as passenger flows recover, so too does direct on-airport employment. By 2022, on-airport employment levels are forecast to be nearly 7,600, or 10.5%, less than 2019 levels. It takes until 2023 for direct on-airport jobs to return close to 2019 levels.

[18] According BRES data, approximately 22,000 jobs in the air passenger sector moved from Hillingdon to Hounslow in 2015. ONS have informed us that this shift in jobs reflects a boundary change, which meant one company or local unit was now being assigned to Hounslow. In reality the jobs will still take place at the airport and therefore in Hillingdon. Nonetheless, the published BRES data will record a significant amount of on-airport jobs in Hounslow. We discuss this further later in the report.

Fig. 22. Direct on-airport employment in Hillingdon, 2013 to 2025



Source: Oxford Economics

2,850

Direct on-airport jobs filled by Hounslow residents lost in 2021.

Equivalent to a 30% reduction on 2019 levels.

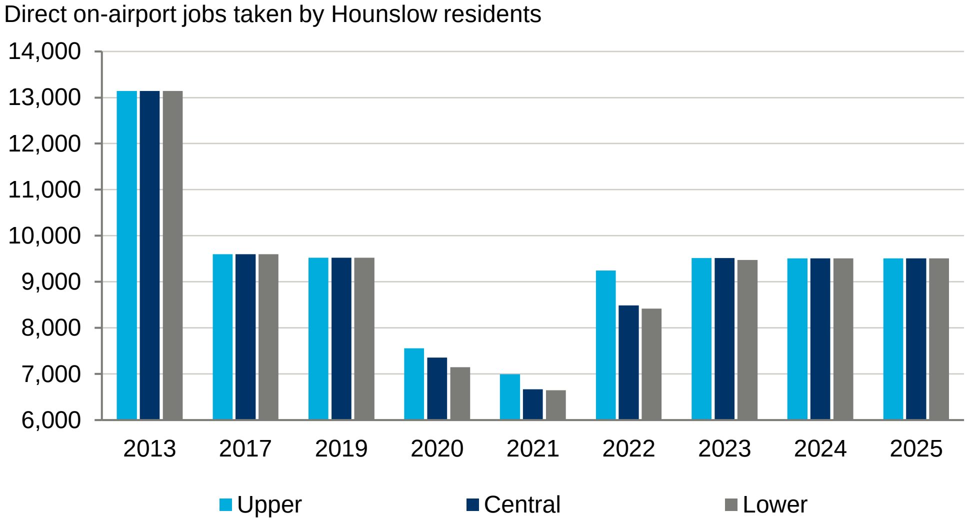
Under our upper scenario, the job loss expected in 2020 is smaller at 12,875, though this still represents a 17.9% fall on 2019 levels. Job losses mount in 2021, though they are less downbeat than the central scenario, as passenger numbers have still not fully recovered, but the Furlough Scheme has been removed. The stronger recovery in passenger numbers expected in 2022 feeds into on-airport employment, with employment levels only 2.8% below 2019 levels.

Under the lower scenario, job shedding is expected to reach nearly 16,700 in 2020 (or 23.1% lower than 2019 levels). Passenger numbers in 2021 are relatively similar to the central scenario and hence the outlook for direct on-airport jobs is only slightly more downbeat. As the recovery in passenger numbers takes a slightly longer time to be realised, so too does the return of direct on-airport jobs. As a result, direct on-airport employment in the lower scenario would match that in the upper scenario in 2024.

We forecast a similar picture for direct on-airport jobs taken by Hounslow residents, with full recovery not expected until 2023 (of course our recovery assumes that as jobs gradually recover, Hounslow residents take up the same share as before). Under our central scenario the number of residents employed directly on-airport at Heathrow Airport falls by nearly 2,170 in the year to 2020. This is equivalent to a 22.8% fall in jobs and is larger than the fall in all direct on-airport jobs given our assumptions that catering, and retail jobs are more exposed to passenger numbers and that Hounslow residents account for a greater than average proportion of these roles.

As expected, a greater number of Hounslow residents lose their job at the airport in 2021 (with a loss of 2,850 compared to 2019). While we forecast a strong recovery in 2022, we still expect direct on-airport employment filled by Hounslow residents to be more than 1,030 lower than 2019 levels.

Fig. 23. Direct on-airport jobs taken by Hounslow residents, 2013 to 2025



Source: Oxford Economics

1,620

Direct off-airport job losses in Ealing, Hillingdon, Hounslow, Spelthorne and Slough in 2021.

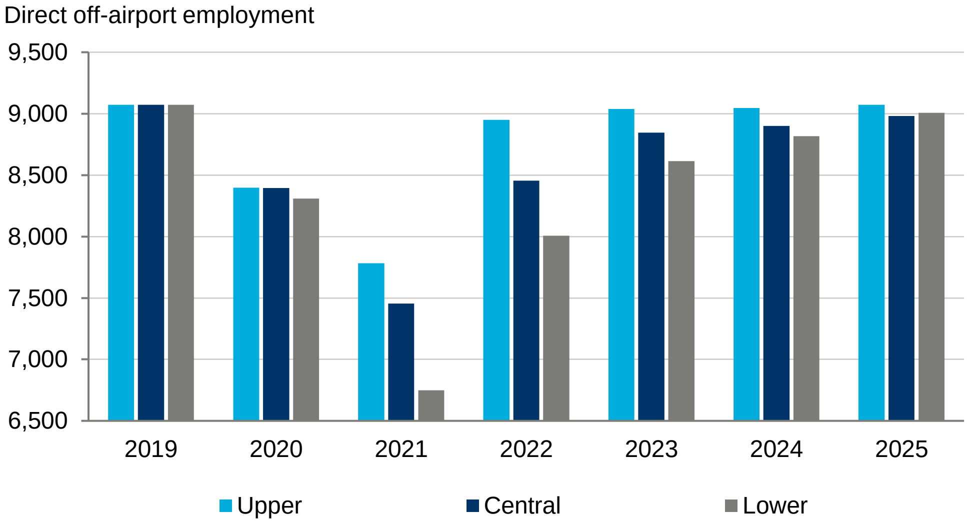
Equivalent to a 17.8% fall.

Across our three scenarios, there is not a substantial difference in job loss for Hounslow residents, except for 2022. In our upper scenario the faster recovery in passenger numbers pushes demand up for catering & retail and hence Hounslow's direct on-airport jobs are only 2.9% below our estimate for 2019. This compares to 10.9% in the central scenario and 11.6% in our lower scenario.

4.2.2 Off-airport

Our estimated change in direct off-airport employment is less extreme in both absolute and percentage terms. In our central scenario, we forecast a reduction of nearly 680 jobs in the London Boroughs of Ealing, Hillingdon and Hounslow; as well as Spelthorne and Slough in 2020 (a 7.5% fall). However, a greater job loss is expected in 2021 (of nearly 1,620, or a fall of 17.8% compared to 2019 levels). Over the five-year forecast period, direct off-airport jobs do not return to 2019 levels—and are 1% lower by 2025.

Fig. 24. Direct off-airport employment in Ealing, Hillingdon, Hounslow, Spelthorne and Slough



Source: Oxford Economics

Under our upper scenario we estimate jobs would be effectively recovered by 2023 with only 35 less jobs than in 2019.

Under the lower scenario, we estimate one in every four (25.6%) of direct off-airport jobs could be lost in 2021. This is equivalent to 2,325 fewer jobs than in 2019. It is worth noting that under our pessimistic scenario we expect a slightly better outcome in 2025 relative to the central scenario. This is driven by our downside trade forecasts which show trade volumes rising above baseline levels in 2025 as the global economy compensates for sluggish growth over the previous five years. It does not mean the economy is in a better position in the lower scenario by 2025. Indeed, across all previous years the London Boroughs of Hillingdon and Hounslow would suffer from lower employment levels.

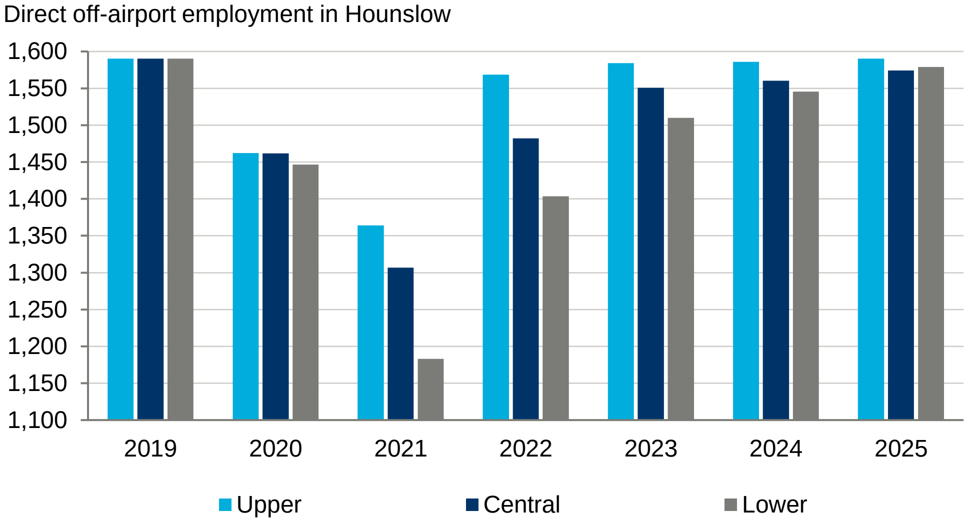
280

Direct off-airport job losses in Hounslow in 2021.

Equivalent to a 17.8% fall, but it could reach 25.6% in our lower scenario.

Recovery for Hounslow follows a similar trajectory. We estimate a fall of 8.1% in direct off-airport jobs in the year to 2020 (c.130 jobs). However, with the Furlough Scheme removed and passenger numbers and cargo volumes still recovering, we estimate direct off-airport employment in Hounslow would be nearly 280 jobs lower than 2019 levels (a fall of 17.8%). Under the lower scenario, our 2021 estimate is for a loss of nearly 410 jobs, more than 25.6% less.

Fig. 25. Direct off-airport employment in Hounslow



Source: Oxford Economics

4.3 ACCOUNTING FOR INDIRECT AND INDUCED IMPACTS

4.3.1 Central scenario

We have modelled the indirect and induced impacts of the scale of job losses at Heathrow (accounting for the direct on-airport jobs taken by Hounslow residents), and in Hounslow (through the direct off-airport businesses). As expected, we find that the fall in Hounslow's workplace-based employment is limited given a) our measure of direct off-airport activity in Hounslow for 2019 is notably smaller than it might be when compared to published employment data (see earlier discussion in Section 2.3) and b) the dramatic fall in activity in 2020 is mitigated by the Furlough Scheme. However, there is a more significant impact on resident employment as greater numbers of Hounslow residents lose their direct on-airport job.

3,790

Lost resident-based jobs in Hounslow in 2021 (relative to 2019 levels).

This compare to 1,770 lost workplace-based jobs in Hounslow in 2021 (relative to 2019 levels).

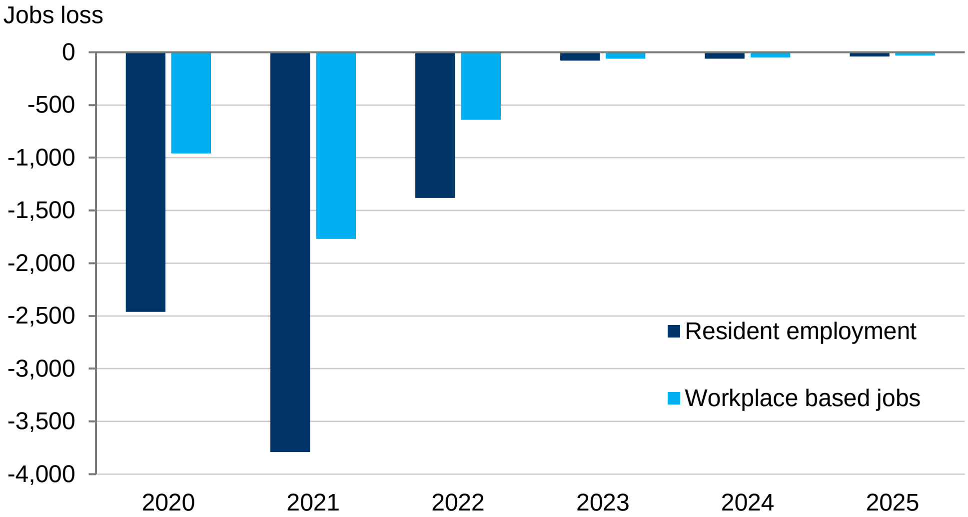
Fig 23 shows that, over the next five years, workplace-based job losses could peak at 1,770 in Hounslow when compared to 2019 levels. However, this masks the larger loss of resident-based jobs, which fall by 3,790 in 2021 (compared to 2019)—equivalent to a 2.7% decline in resident employment. It is this loss in residents employed that leads to an estimated £189.5 million fall in consumer expenditure in Hounslow in 2021 (which is equivalent to a 2.7% fall in total consumer expenditure in Hounslow in 2019).

Fig. 26. Hounslow workplace-based employment change, 2020 to 2025

Hounslow workplace based employment	2020	2021	2022	2023	2024	2025
Direct off-airport only	-130	-280	-110	-40	-30	-20
Indirect	-720	-1,290	-470	-20	-20	-10
Induced	-110	-190	-70	0	0	0
Total	**-960**	**-1,770**	**-640**	**-60**	**-50**	**-30**

Source: Oxford Economics

Fig. 27. Hounslow workplace-based employment change vs resident employment change, 2020 to 2025



Source: Oxford Economics

£174.6 m

In lost GVA contributions to GDP in Hounslow in 2021 (relative to 2019 levels).

This is equivalent to a 24.8% reduction in Heathrow's total GVA impact on the Hounslow economy.

The loss of workplace-based jobs in Hounslow will in turn impact GVA contributions to GDP. In 2021, we estimate that GVA would be £174.6 million lower than in 2019 in our central scenario. This is equivalent to a 24.8% reduction in Heathrow Airport's total GVA impact on the Hounslow economy.

Fig. 28. GVA impacts in Hounslow

Hounslow (£m, constant prices)	2020	2021	2022	2023	2024	2025
Direct GVA	-7.2	-17.2	-6.7	-3.3	-2.5	-1.4
Indirect GVA	-67.0	-124.2	-45.6	-1.8	-1.5	-1.2
Induced GVA	-18.1	-33.1	-12.2	-0.6	-0.5	-0.4
Total GVA	-92.3	-174.6	-64.4	-5.7	-4.6	-3.0

Source: Oxford Economics

4.3.2 Upper and lower scenarios

Under the upper scenario, where passenger numbers and trade recover faster than in our central scenario, the adverse impact of reduced activity at Heathrow peaks in 2021 with an estimated 1,530 job losses—of which, 1,300 are due to supply chain and consumer spending effects. In addition, workplace-based employment levels effectively return to 2019 levels by 2023.

Under the more pessimistic lower scenario, we estimate workplace-based job losses in Hounslow could total 1,960 in 2021 (1,560 of which are due to supply chain and consumer spending effects). In addition, it takes until 2025 for employment levels to return close to 2019 levels.

Fig. 29. Hounslow workplace-based employment impacts, 2020 to 2025

Hounslow workplace based employment	2020	2021	2022	2023	2024	2025
Central	-960	-1,770	-640	-60	-50	-30
Upper	-820	-1,530	-160	-10	-10	-10
Lower	-1,120	-1,960	-790	-140	-70	-20

As already noted, the more meaningful impacts of reduced activity at Heathrow are felt on resident employment in Hounslow. Under our upper scenario, peak job losses in 2021 are estimated at 3,320—compared to a loss of just over 3,790 in the central scenario. By 2022, we estimate job losses relative to 2019 levels would be around 360, before falling to just 20 in 2023. Under the central and lower scenario, we still estimate resident-based employment to be around 40 jobs lower by 2025.

Fig. 30. Hounslow resident-based employment impacts, 2020 to 2025

Hounslow resident based employment	2020	2021	2022	2023	2024	2025
Central	-2,460	-3,790	-1,380	-80	-60	-40
Upper	-2,150	-3,320	-360	-20	-20	-20
Lower	-2,790	-4,010	-1,580	-190	-90	-40

Source: Oxford Economics

£189.5 m

fall in consumer expenditure in Hounslow in 2021 in our central scenario.

This could rise to just over £200m in our lower scenario.

With lower levels of residents employed directly on- and off-airport, as well as in the supply chain, consumer expenditure in Hounslow suffers. This in turn creates more job losses in sectors such as retail and personal services. We estimate that consumer expenditure would be over £166 million lower in 2021 in our upper scenario, and more than £200 million in our lower scenario.

Fig. 31. Hounslow consumer expenditure impacts, 2020 to 2025

Consumer expenditure (£m, 2016 prices)	2020	2021	2022	2023	2024	2025
Central	-115.8	-189.5	-70.5	-3.9	-3.3	-2.3
Upper	-101.3	-166.1	-18.4	-1.2	-1.2	-1.0
Lower	-131.2	-200.3	-80.9	-9.8	-4.5	-1.9

Source: Oxford Economics

As expected, GVA contributions to GDP would also fall through the loss of workplace-based jobs in Hounslow. Under the central scenario, GVA contributions were estimated to fall by as much as 24.8% in 2021 (compared to 2019 levels). Under the upper scenario GVA losses are reduced to £151.4 million or 21.5% of 2019 levels. However, under the lower scenario they rise to £191.1 million of GVA losses or 27.2% of 2019 levels.

Fig. 32. Hounslow GVA impacts, 2020 to 2025

Hounslow GVA losses (£m, constant prices)	2020	2021	2022	2023	2024	2025
Central	-92.3	-174.6	-64.4	-5.7	-4.6	-3.0
Upper	-77.9	-151.4	-16.3	-1.4	-1.3	-0.9
Lower	-107.9	-191.1	-77.8	-13.0	-6.5	-2.4

Source: Oxford Economics

4.4 HOW MIGHT JOB LOSSES BE FELT IN HOUNSLOW?

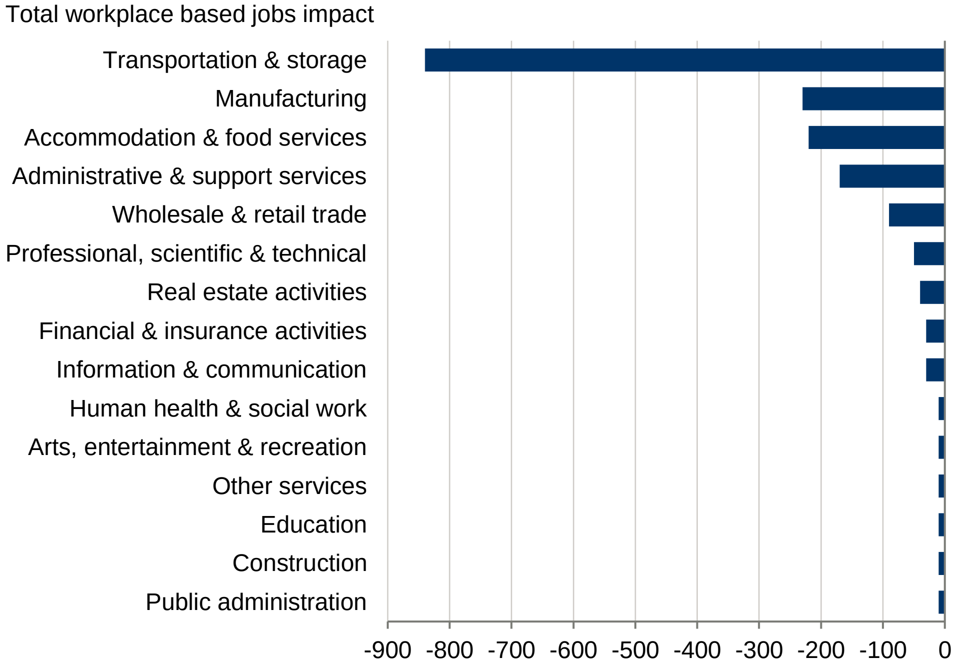
We know from Section 1 that a very low proportion of high value-added direct jobs on-airport are taken by Hounslow residents (such as management and IT). Similarly, most off-airport jobs will be in lower value-added hotels & accommodation or in transportation & storage, which despite the latter earning slightly higher wages than the London average, are unlikely to require NVQ 4+ qualifications. Consequently, direct job losses will be concentrated in lower value-added parts of the economy and hence on lower skilled residents.

When we factor in indirect and induced impacts that arise from reduced activity at Heathrow Airport, we estimate that the largest loss of jobs will be in transport & storage. An analysis of Annual Population Survey (APS) data shows that 72.5% of those employed in the sector are aged between 25 to 49, with only 5.7% aged under 24. Of the 9 broad sectors covered by the APS, the transport & communication sector has the joint highest proportion of employees aged 25 to 49 (along with Banking, finance and insurance). Given the dominance of this age group, we can assume there is a high likelihood that many of those vulnerable to job loss in the sector could also have young dependents. In addition, an analysis of APS occupational data shows that nearly 95% of transport and mobile machine drivers and operatives are filled by males and nearly 83% of all jobs in this occupation are full-time.

Furthermore, according to the Census, only a small share of the workforce population in the transport & storage sector are qualified to NVQ level 4+ (22.4% compared to 43.3% for the economy average). Indeed, over a third of the workforce are qualified to NVQ level 1 or below (the highest share of all broad sectors). Although our modelling earlier shows that jobs are gradually recovered over the forecast period, there is no guarantee that the those losing their job will be rehired. In addition, there is also a strong pool of evidence that the longer an individual is out of employment, the harder they find it to return.

Therefore, those subject to job loss in the sector are likely to need additional training or upskilling to access job creation in the rest of the economy. This is increasingly important given we forecast job creation will be driven by high value-added service sectors.

Fig. 33. Change in workplace-based jobs in Hounslow, 2021



Source: Oxford Economics

In addition, we estimate that manufacturing will experience the second largest number of job losses in 2021 as reduced activity impacts on supply chains. Census data shows that the manufacturing sector also has an above average share of jobs taken by males (65.3%). However, Census data also tells us that an above average share of those working in manufacturing in Hounslow are qualified to Level 4+. Therefore, they are likely to be better positioned to find alternative work.

Accommodation & food services and wholesale & retail trade sector also experience notable falls in employment in our central scenario (220 and 90 jobs respectively in 2021). Interestingly, data from the APS shows that the distribution, hotels & restaurants sector (which includes retail) in London has the largest number and share of jobs taken by people aged 25 or younger. Unsurprisingly, the APS also shows that 54.5% of sales occupations in London are part-time while 45.3% of elementary administration and service occupations (which includes elements of catering as well as cleaning) are also part-time. Therefore, we can assume that job losses in these hospitality and retail sectors at Heathrow Airport will impact proportionally more on:

- The lower skilled given the types of jobs that are most vulnerable and the sectors that we estimate will experience the bulk of job cuts;
- The lower paid, again given the types of jobs and sectoral impacts;
- The young as they make up a larger proportion of the jobs at risk and often prefer part-time working arrangements as it enables them to also study; and
- Other residents that prefer part-time working such as single parents, or those also having to care for family.

4.5 CATALYTIC IMPACTS

The catalytic effects of Heathrow Airport are likely to be significant. We know from previous estimates that they could have ranged from 13,395 to 26,790 in 2010[19]. Clearly most businesses will have suffered from the lockdown and disruption to global supply chains. They may continue to suffer as the local, national and global economies gradually recover. They may also experience a change in working practices and in how they make business location decisions given the widescale remote working of recent months. However, how might these businesses be impacted, by reduced activity at Heathrow now and in the future?

It is difficult to isolate the impacts of reduced activity of Heathrow from the wider coronavirus and behavioural impacts. We would argue though, that catalytic businesses already located in Hounslow are unlikely to move in the short to medium term due to reduced levels of passenger flows or cargo volumes. Assuming the UK air travel policies are not materially different from others in the world, businesses are unlikely to benefit from moving elsewhere. Should a catalytic business decide to reduce its workforce, it is likely this is a reaction to the economic impact of the coronavirus outbreak and associated lockdown, rather than Heathrow Airport itself having to recover over the coming three or four years.

However, should the lower passenger numbers and cargo make some air routes no longer viable at Heathrow, a reduction in destinations served by Heathrow might have a detrimental impact on existing businesses that have decided to locate in Hounslow based on the assumption they would have access to these and other markets. Though even if this was to happen it is likely that it would take a considerable time for catalytic businesses to relocate away from Hounslow.

It is more likely that reduced air travel, cargo volumes or a reduction in destinations served by Heathrow Airport would impact on future potential investments in Hounslow. This is however very difficult to measure.

4.6 REDUCED ACTIVITY COULD HAVE A SIGNIFICANT IMPACT

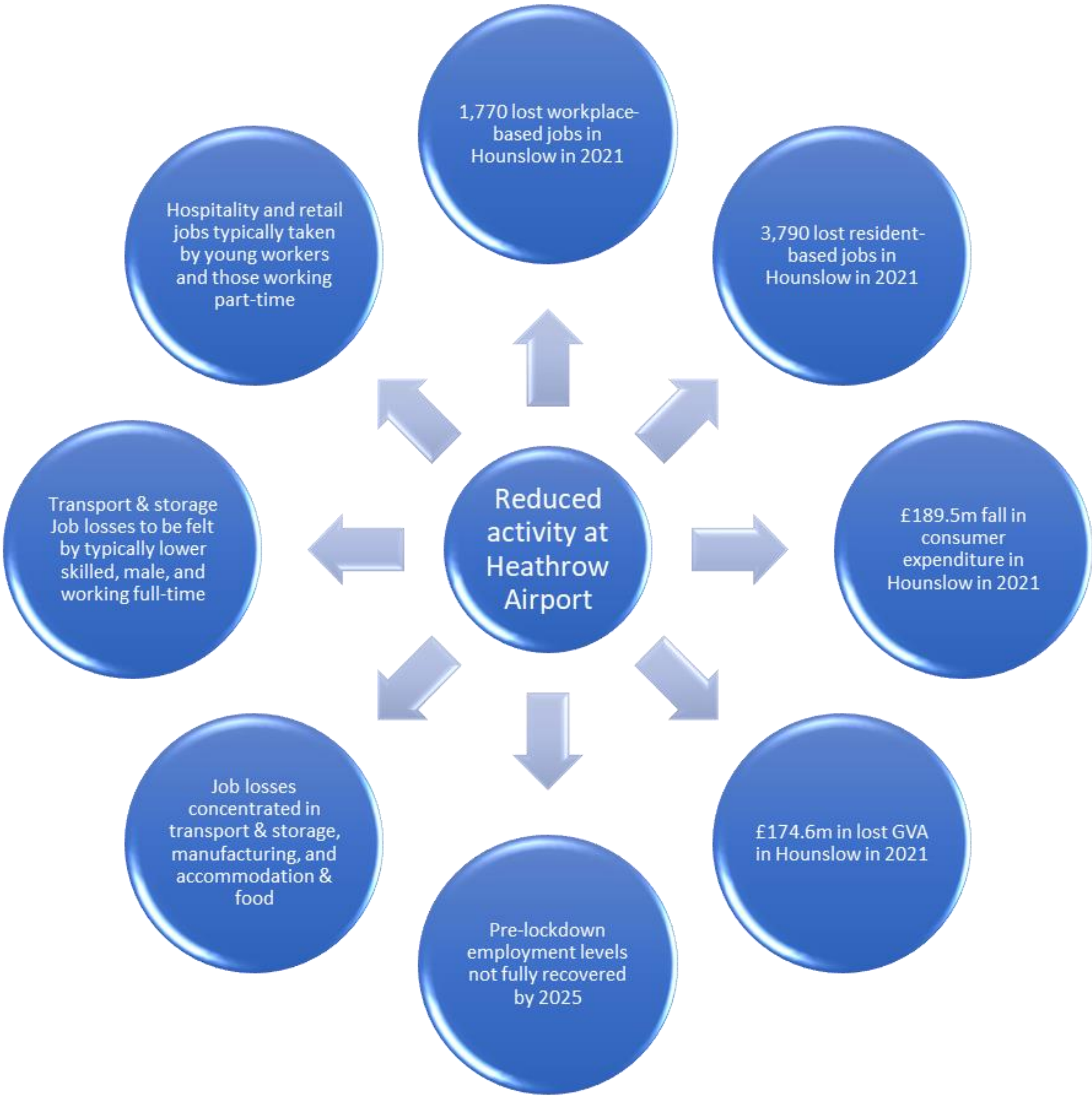
Given the findings above, it is clear that reduced activity at Heathrow Airport could have a significant impact on the Hounslow economy. Although workplace-based employment falls are estimated to be 1,770 in 2021 (relative to 2019 levels), the fall in resident employment (3,790 jobs) is much more severe resulting in £189.5 million of lost consumer expenditure in 2021.

The concentration of job losses in transport & storage, manufacturing, accommodation & food services and retail mean that the labour market impacts will be felt most by the lower skilled and the lower paid. A significant share is likely to be male, aged between 25 and 49 and working full-time, given the loss of transport & storage jobs. However, job losses in accommodation & food services as well as retail will have a disproportionate impact on local young workers and those working part-time.

[19] Parsons Brinckerhoff (2013): Heathrow Employment Impact Study

Throughout this paper we have sought to isolate the impact of reduced activity at Heathrow Airport on the Hounslow economy and in so doing try to decouple it from the inherent impacts of the lockdown and measures to combat the coronavirus. In reality, they are interlinked and hence the impacts of reduced activity at Heathrow will be felt during a time of substantial economic downturn and challenges in the Hounslow economy. Therefore, our estimate of 3,790 fewer resident-based jobs in 2021 is part of a much larger loss of jobs in the economy. We discuss this in the next section.

Fig. 34. How reduced activity at Heathrow Airport could impact Hounslow



5. THE OUTLOOK FOR HOUNSLOW

5.1 INTRODUCTION

In early June 2020, Oxford Economics provided Hounslow and the West London Alliance with an analysis of their recent economic performance and their baseline outlook (taken from our May forecasts). Now that we have undertaken an assessment on the impacts of Heathrow, we have revisited our baseline forecasts for Hounslow and adjusted them slightly to reflect the findings above.

As noted earlier, the outlook for Heathrow is just one of many factors influencing the Hounslow economy and therefore it is very difficult to disentangle the Heathrow effect from our May baseline outlook. Nevertheless, we have compared our estimated sectoral job losses from 2020 to 2025 in this study with those projected in our May forecasts and have made changes to the outlook for the transport & storage sector.

In producing a set of adjusted baseline forecasts it is important to note that we are using two different modelling approaches. Our economic impact model developed for this Heathrow study, is different from our UK Local Authority forecast model. Although the forecast model has equations that estimate the sectoral impacts of changes in different parts of the economy (like the impact model used to arrive at the above estimates), they do so with a lag and hence the annual impacts produced by both models will not the be the same.

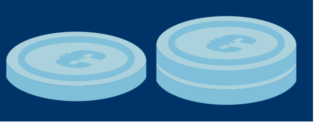
It is also worth noting that our forecast model uses BRES data to measure workplace based sectoral employment in each local authority area. We know that in 2015, approximately 22,000 jobs in the ‘scheduled passenger air transport’ sector shifted from Hillingdon to Hounslow. ONS informed us that this shift in jobs related to one local unit and a boundary change (the postcode that was being used for these jobs was now being assigned to Hounslow). In reality (as discussed and agreed with Hounslow Council) these jobs undoubtedly are located within the Heathrow boundary and the shift in jobs from Hillingdon to Hounslow is simply an administrative issue. Nonetheless, the results of our forecast model reflect the relocation of these jobs.

The 22,000 jobs equate to approximately one third of the transport & storage jobs at Heathrow airport. In producing adjusted baseline forecasts, we therefore assume one third of any change in the transport & logistics jobs at Heathrow happen in Hounslow. As such, the results from our forecast model are not directly comparable to the results above in this study.

11% decline

GVA contraction in 2020.

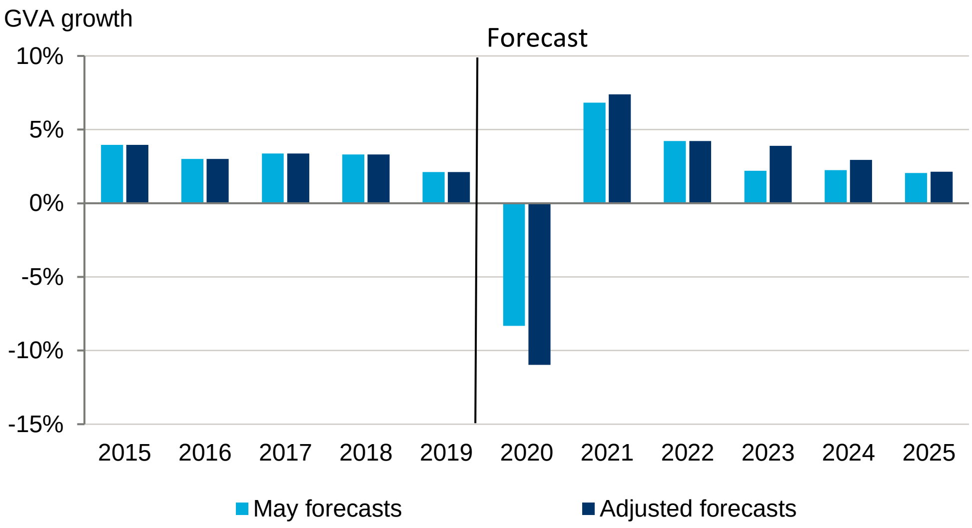
Transportation & storage and information and comms amongst the hardest hit.



5.2 GVA

Our adjusted baseline forecasts suggest that the Hounslow economy will contract by 11% in 2020, 2.6 percentage points more than in our May forecasts. This downgrade is driven by changes to the transport & storage sector. Our more downbeat forecast for the sector reflects the fact that passenger flows at Heathrow effectively stopped in April and May, while the Tourism Economics and IATA forecasts suggest UK passenger flows in 2020 will be around 45% of 2019 levels. Alongside this forecast of a deeper recession, we expect a slightly faster bounce back in 2021 (7.4% compared to 6.8% previously).

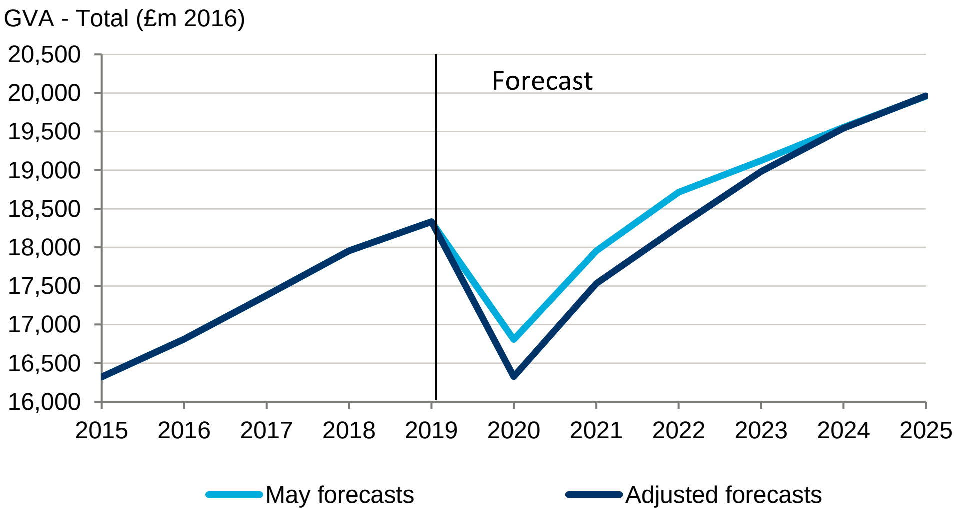
Fig. 35. GVA growth 2015 to 2025



Source: Oxford Economics

Although we still forecast GVA levels in the Hounslow economy to reach nearly £20 bn by 2025, the economy is expected to return to 2019 levels of GVA in 2023 rather than in 2022 as previously estimated.

Fig. 36. GVA, 2015 to 2025



Source: Oxford Economics

8,000

Decline in jobs total in 2020

We now expect a slightly deeper contraction in jobs this year.

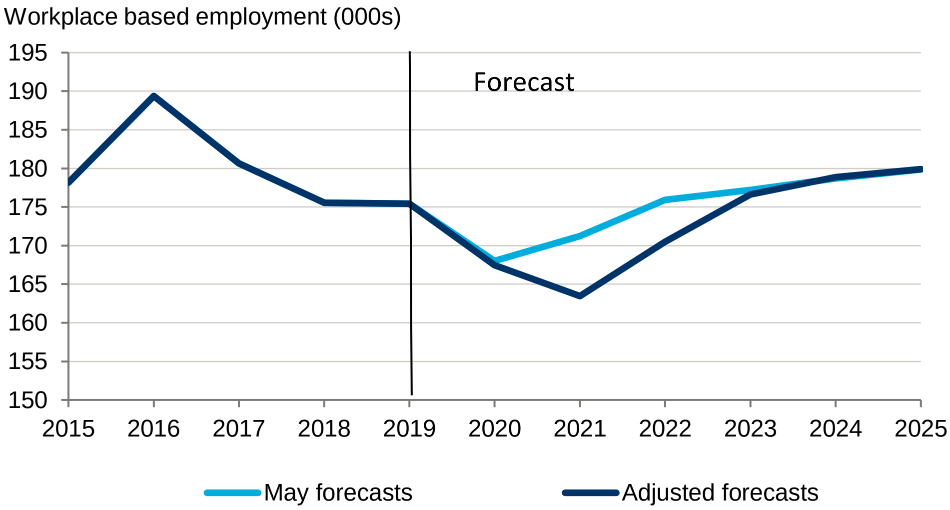
5.3 LABOUR MARKET

In terms of jobs, we forecast workplace-based employment in the borough to contract by 4.5%, or 8,000 jobs, in 2020 (slightly worse than the 4.2% and 7,400 jobs losses in our May forecasts). The downward revision reflects an additional 600 jobs being lost in the transport & storage sector this year, leading to a total loss of 3,200 jobs in the sector (the most of the 19 sectors covered in the forecasts). As we discussed in our previous work for the Council and the WLA, we had also forecast notable job losses in accommodation & food services and wholesale & retail trade in 2020 (1,500 and 1,300 respectively), and this is no different in our adjusted forecasts.

Our analysis of the impact of reduced activity at Heathrow suggested job numbers would be kept artificially high due to the furlough scheme and that losses could peak in 2021. This has led us to revise down workplace-based jobs in transport & storage in 2021, so that instead of starting to recover and regain around 800 of the jobs lost in 2020 (as per our May forecasts), we now project the sector to continue to shed jobs – 5,000 in total in 2021. Again, it is worth noting that this fall in workplace-based jobs in Hounslow reflects the 22,000 air transport jobs that shifted from Hillingdon to Hounslow in the BRES data.

Consequently, we forecast workplace-based employment to recover to 2019 levels by 2023 rather than 2022 previously. However, we continue to project employment levels of just under 180,000 by 2025.

Fig. 37. Workplace based employment, 2015 to 2025



Source: Oxford Economics

Our forecasts also continue to reflect the fact that employment growth over the forecast period will be driven mainly by higher value added and skills hungry sectors of the economy including information & communication (1,700 jobs), health (1,000 jobs), admin and support services (600) and professional, scientific and technical (500). Indeed, we forecast the transportation & storage sector to be 200 jobs smaller by 2025 while the manufacturing sector will continue its long-term employment contraction and shed 500 jobs.

Regardless of the drivers of growth, the transport & storage sector is forecast to remain the largest source of employment in the Borough by 2025, accounting for over a quarter of jobs.

Fig. 38. Workplace based employment growth, 2019 to 2025

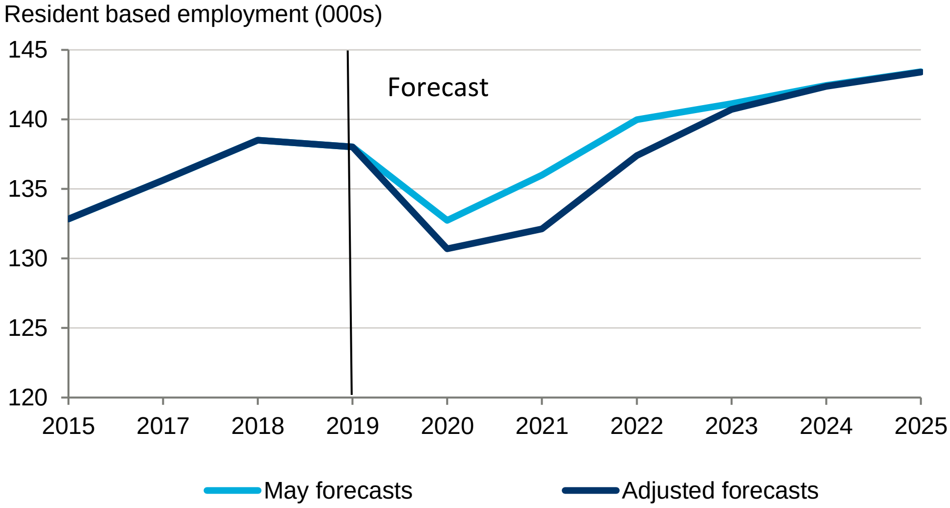
Workplace based employment (2019 - 2025)	Adjusted forecasts		May forecasts	
	000s	%	000s	%
Agriculture, forestry and fishing	0.0	-8.7%	0.0	-8.7%
Mining and quarrying	-0.1	-18.1%	-0.1	-18.1%
Manufacturing	-0.5	-11.4%	-0.5	-11.4%
Electricity, gas, steam and air conditioning supply	0.0	-3.4%	0.0	-3.4%
Water supply; sewerage, waste management and remediation activities	0.0	-2.1%	0.0	-2.1%
Construction	0.0	0.8%	0.0	0.8%
Wholesale and retail trade; repair of motor vehicles and motorcycles	0.2	1.0%	0.2	1.0%
Transportation and storage	-0.2	-0.4%	-0.2	-0.5%
Accommodation and food service activities	0.6	5.5%	0.6	5.5%
Information and communication	1.7	7.7%	1.7	7.7%
Financial and insurance activities	-0.1	-2.6%	-0.1	-2.6%
Real estate activities	0.0	0.9%	0.0	0.8%
Professional, scientific and technical activities	0.5	4.0%	0.4	4.0%
Administrative and support service activities	0.6	4.3%	0.6	4.2%
Public administration and defence; compulsory social security	0.0	-0.3%	0.0	-0.3%
Education	0.5	5.0%	0.5	5.0%
Human health and social work activities	1.0	7.9%	1.0	7.9%
Arts, entertainment and recreation	0.2	6.7%	0.2	6.7%
Other service activities	0.0	1.3%	0.0	1.3%
Total	**4.5**	**2.6%**	**4.4**	**2.5%**

Source: Oxford Economics

The same trends are seen in our adjusted forecasts for resident-based employment in Hounslow. Our downward revisions to job losses in both Hounslow and Hillingdon lead to a deeper contraction in Hounslow resident employment in 2020 and a slower recovery, albeit we expect resident employment levels to match those in our May forecasts by 2024 and beyond.

Indeed, we forecast resident employment will fall by 7,300 in 2020 or by 5.3% (compared to 5,300 jobs losses and 3.8% in our May forecasts), as the lockdown smothers economic activity across the economy. Our expected recovery in 2021 has been move than halved in our adjusted forecasts to just 1,400 resident jobs gained. Though the pace and scale of recovery speeds up in 2022 meaning resident job levels are close to 2019 levels.

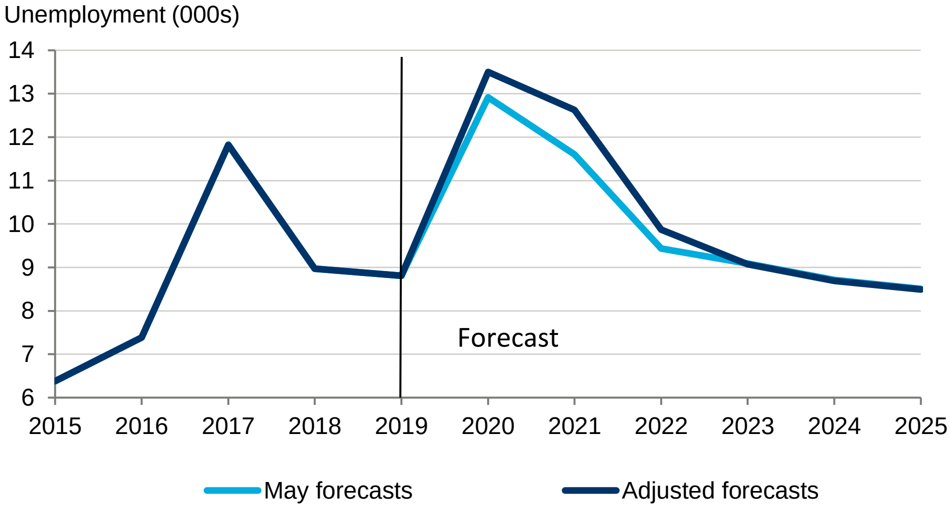
Fig. 39. Resident based employment, 2015 to 2025



Source: Oxford Economics

The additional loss of resident jobs leads to higher levels of ILO unemployment from 2020 to 2022. As a result, the rate of ILO unemployment is forecast to peak in 2020 at 9.4% (0.5 pps higher than our may forecast).

Fig. 40. ILO unemployment, 2015 to 2025



Source: Oxford Economics

5.4 CONCLUSIONS

Our analysis of the impact of reduced activity at Heathrow has led us to revise down our May forecasts in the short-term. This is driven by an increase in job losses in the transport & storage sector in both 2020 and 2021. It means we now forecast the local economy to return to 2019 levels of economic activity a year later than we had in our May forecasts. However, beyond 2023 we expect the economy to be roughly the same size as we previously forecast and hence our adjustments are confined to the next three years.

TECHNICAL ANNEX

ECONOMIC IMPACT MODELLING

Economic impact modelling is a standard tool used to quantify the economic contribution of a company or in this case, a group of companies operating at and around a key local asset. Impact analysis traces the economic contribution through three separate channels:

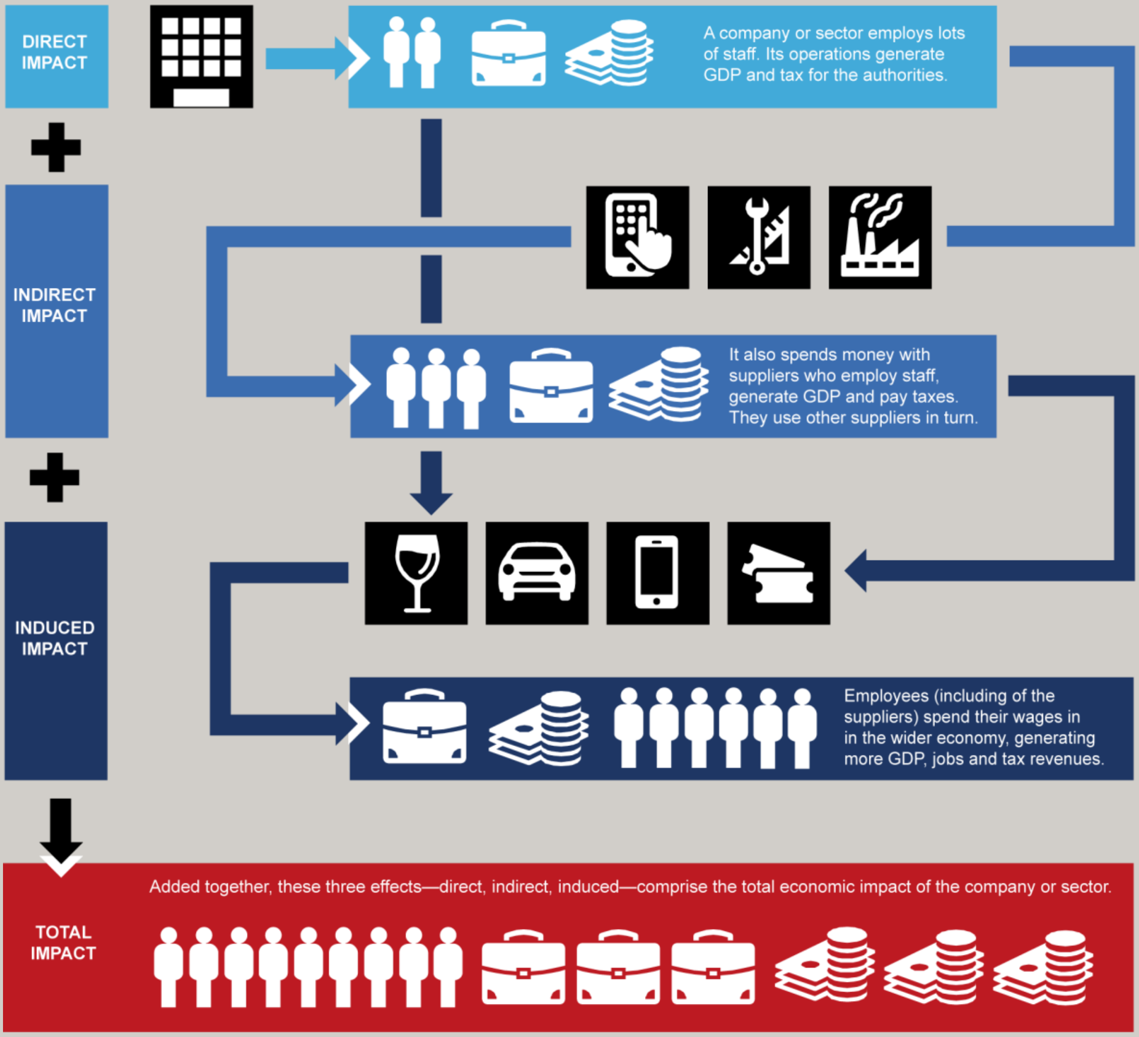
- **Direct impacts**: refer to the direct activity of businesses at the airport and those based off-airport and includes all employees, their wages and output;
- **Indirect impacts:** consists of activity that is supported because of the procurement of goods and services by the businesses above. It includes not just purchases by those based at Heathrow and around it, but the subsequent rounds of spending throughout the supply chain.
- **Induced impacts:** refer to activity supported through the consumer spending of those employed directly or indirectly.

Indirect and induced impacts were estimated using an input-output model. An input-output model gives a snapshot of an economy at any point in time. The model shows the major spending flows from 'final demand' (i.e. consumer spending, government spending investment and exports to the rest of the world); intermediate spending patterns (i.e. what each sector buys from every other sector—the supply chain in other words); how much of that spending stays within the economy; and the distribution of income between employment and other forms such as corporate profits.

In building our impact model we adjusted the UK input-output tables to account for the local characteristics of the local economies of Hillingdon and Hounslow. In doing so we used academic guidelines like those contained in academic papers such as Flegg & Tohmo (2013).[20]

[20] Flegg, A. T. and Tohmo, T., (2013); *"Regional input-output tables and the FLQ formula: A case study of Finland"*, (Regional Studies, 47 (5). pp. 703-721).

Fig. 41. Economic impact assessment



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