Economic impact of Gatwick Airport

Evaluating the local economic impact of the airport

Prepared for
Gatwick Airport Ltd

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Executive summary

This report, prepared on behalf of Gatwick Airport Limited (GAL), presents an evaluation of Gatwick Airport's value in the local economy. Following the impact of the COVID-19 pandemic on traffic in the UK and abroad, Oxera has been asked to update previous estimates of the economic value of Gatwick Airport.

We have used the impact assessment methodology applied in previous work for GAL, including as part of the 2019 Gatwick Master Plan and more recently in supporting the Northern Runway Project DCO application. To reflect the uncertainty around the airport's wider economic impact due to the effects of the pandemic, we have adapted this methodology to provide a range of impact estimates for 2020.

In the past year, Gatwick has had to adapt its operations to public health measures and travel restrictions that have prevented passengers from travelling, reducing traffic substantially. While the airport operated under normal conditions in the first two months of Q1 2020, it had to reduce operations as the pandemic unfolded during the rest of the year. The economic impact estimates we present in this report correspond to the average economic impact of the airport throughout the year. In these exceptional circumstances, Gatwick Airport and other companies on-site responded to the pandemic by reducing working hours for employees when possible and preserved jobs through the implementation of furlough.

Overall, Gatwick Airport provides significant value to the local economy. It represented a total of 36,700 jobs and £2.1bn in gross value added (GVA) in the UK in 2020 through the economic activity on site (known as 'direct' impacts), in the supply chains to those firms (known as 'indirect' impacts), and to firms that locate close to Gatwick Airport because of the business opportunities that it offers ('catalytic' impacts).

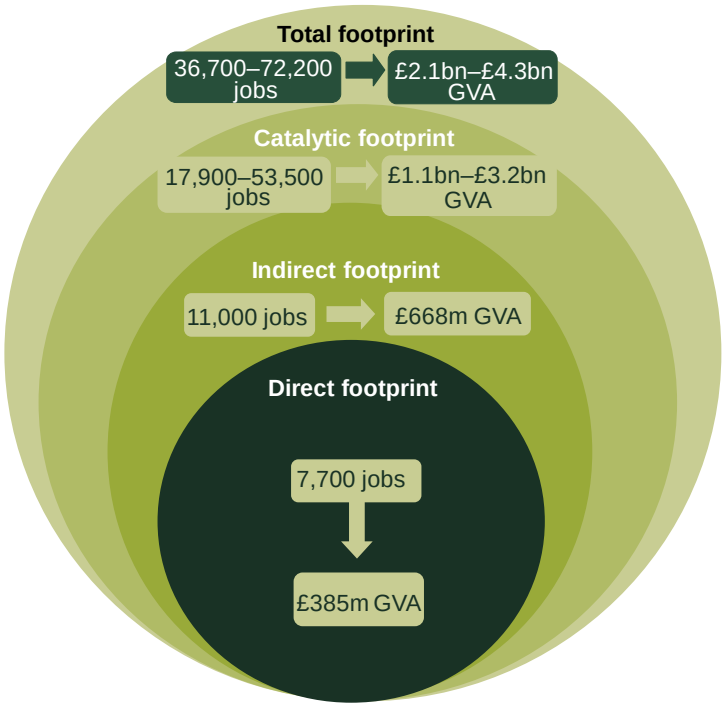
By 2028,[1] the airport's footprint is projected to increase to 139,700 jobs and £9.3bn in GVA as traffic recovers and expands beyond pre-COVID levels. To put these estimates in context, if we were to convert GVA generated by the airport in the UK in 2028 into the equivalent tax take,[2] the airport's value added in the UK could be compared to the cost of providing:

- 248,400 primary school places or 180,500 secondary school places;
- 79,500 nursing positions or 62,900 police positions.

The figure below summarises the economic footprint of the airport in 2020.

[1] Based on traffic forecasts supplied to Oxera by GAL in November 2020. It is likely that the Covid-19 pandemic will have long-lasting impacts on the structure of the economy and the geographic distribution of economic activity: however, it is too early to assess these impacts with any degree of confidence.
[2] Using the ratio of GVA to tax take in the UK as a whole.

The economic footprint of Gatwick Airport in 2020



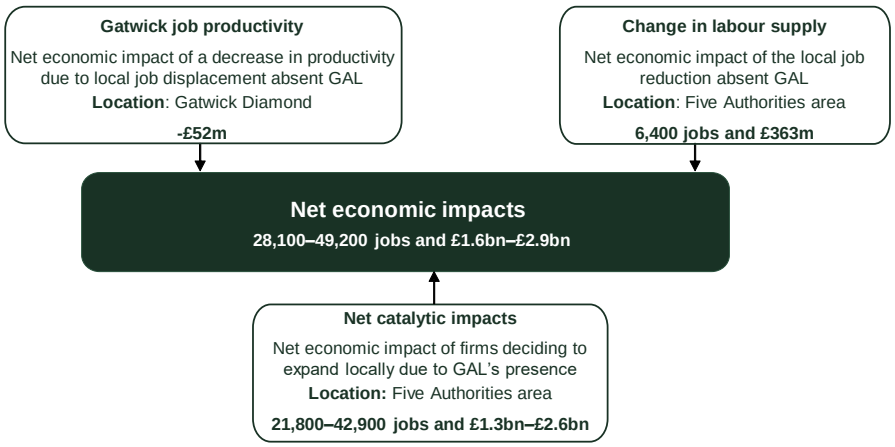
Note: Numbers may not sum due to rounding. 2020 prices. The total indirect footprint impact corresponds to the impact throughout the UK (including outside the Five Authorities area).

Source: Oxera analysis.

One common critique of the 'footprint' measures of economic activity outlined above is that they do not reflect the true economic benefits of an airport because the people employed at the airport would, if there were no airport, be employed in other activities. However, even when taking these effects into account, our analysis suggests that Gatwick Airport makes a significant net contribution to the local area. We estimate that Gatwick provided an additional 28,100 jobs with an annual GVA of £1.6bn in 2020 through greater output and increases in labour supply in the Five Authorities area, rising to 102,700 jobs and £6.9bn of GVA in 2028.

The figure below summarises the net economic impacts of the airport.

The net economic impact of Gatwick Airport in 2020



Note: Numbers may not sum due to rounding. 2020 prices.

Source: Oxera analysis.

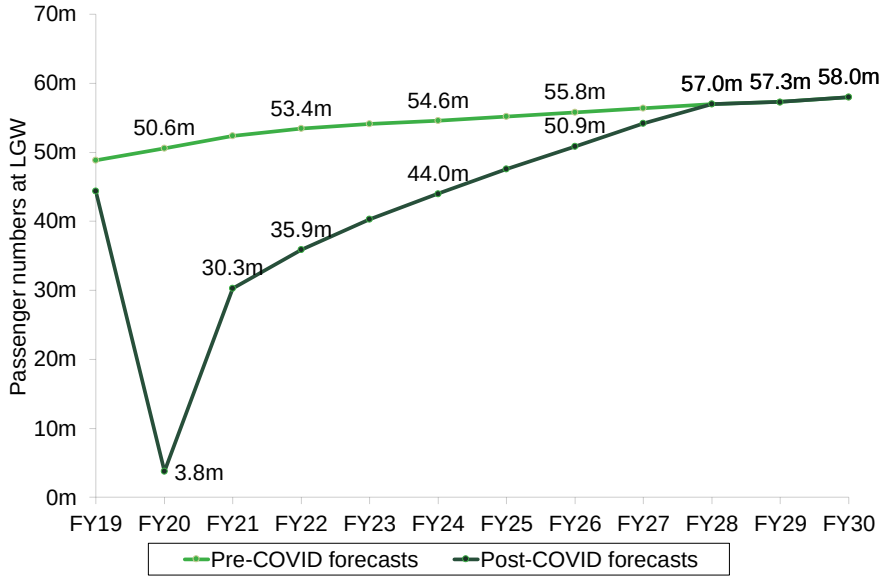
1 Introduction

In light of the significant ongoing effect of COVID-19 restrictions on air travel, GAL has asked Oxera to quantify the economic value of Gatwick Airport to the local economy.

This builds on previous work that Oxera has undertaken for GAL, incorporating new traffic forecasts adjusted for the effect of the COVID-19 pandemic. The estimation methods applied in this report are consistent with the impact assessment methodology used previously by Oxera for the Gatwick Airport Master Plan[3] and the DCO application, although a number of additional changes have been made to reflect updates to input assumptions.

We have been provided with forecasts of air traffic from Gatwick to 2030, prepared by ICF.[4] Figure 1.1 below shows the build-up of passenger volumes from the initial impact of the COVID-19 pandemic in 2020.

Figure 1.1 The impact of the pandemic on traffic at Gatwick Airport



Source: ICF.

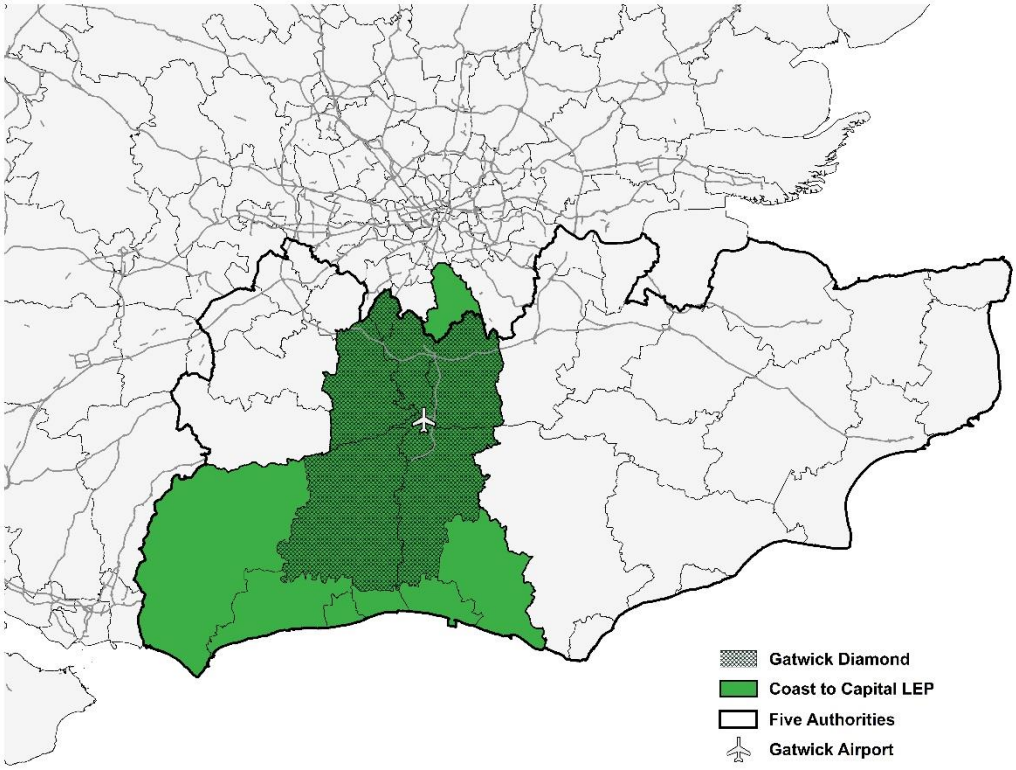
The forecasts suggest that passenger volumes will initially rebound strongly in 2021/22, before transitioning to a more steady recovery path and ultimately reaching 2019/20 levels of traffic in 2024, and 'catching up' to pre-pandemic forecasts by 2028. IATA has estimated that global passenger traffic will return to pre-COVID-19 levels in 2024, which is in line with the ICF forecasts for Gatwick.[5]

In light of these new forecasts, we have reassessed the local economic impact of the airport as a whole on the basis of three spatial areas. These three areas are defined below and are consistent with the areas modelled in the Gatwick Airport Master Plan.[6]

[3] Oxera (2018), 'The economic impact of Gatwick Airport', August.
[4] Passenger forecasts were prepared in November 2020 by ICF prior to the final estimates for full-year passenger numbers for 2020 being available and prior to the release of the UK government's 'Roadmap out of lockdown' in February 2021. Since the production of these traffic forecasts, restrictions on travel for public health reasons has been extended beyond those envisaged at the time the forecasts were produced. As a result the passenger volumes in 2021 are likely to be lower than is shown in the figure,
[5] IATA (2020), 'Recovery Delayed as International Travel Remains Locked Down', 28 July.
[6] Gatwick Airport (2019), 'Gatwick Airport Master Plan 2019', p. 111.

Figure 1.2 shows the geographic coverage of this analysis.

Figure 1.2 The Gatwick Diamond and wider areas of study



Note: The striped areas for the Gatwick Diamond are also part of the Coast to Capital LEP. Similarly, the shaded areas for the Coast to Capital LEP are also part of the Five Authorities area, except the London Borough of Croydon.

Source: Oxera.

We consider the local impact of the airport from two perspectives:

- the **economic footprint**, which measures the total resources used in delivering the economic activity at Gatwick by GVA or employment numbers.[7] It is useful to measure Gatwick's footprint to identify the scale of the airport;
- **net economic impacts**, which reflect the benefits generated above and beyond those that would have arisen anyway had people employed at Gatwick been doing something else. In practice, net impacts assess the incremental impact of the airport by taking into account how resources would be used in its absence.

While it is likely that the Covid-19 pandemic will have long-lasting impacts on the structure of the economy and the geographic distribution of economic activity it is too early to assess these impacts with any degree of confidence. Therefore the analysis presented in this study draws heavily on data from before the pandemic to assess the potential economic impacts of Gatwick in 2020 and in the future.

[7] GVA is a standard measure of economic activity that statistical agencies (such as the Office for National Statistics and Eurostat) routinely use to ascertain an industry's contribution to an economy's total output. It is defined as the total value of output from a service excluding the value of any intermediate inputs (i.e. outputs of other sectors used as inputs from the supply chain).

Table 1.1 provides a summary of the different components of this analysis.

Table 1.1 Local impacts overview

	Type of impact	Analysis
Economic footprint	Direct footprint	Economic activity of firms on site at the airport
	Indirect footprint	Economic activity of the supply chain of firms at the airport
	Catalytic footprint	Economic activity of firms choosing to be located near the airport because of the connectivity it offers
Net economic impacts	Labour supply	Net economic impacts on jobs in the study area
	Job productivity	Additional productivity generated by jobs related to airport activities
	Catalytic net impacts	Net catalytic impact of the airport considering that firms could locate or expand in another location without the connectivity offered by Gatwick

Source: Oxera.

The remainder of this report is structured as follows.

- Section 2 discusses our analysis of the economic footprint of the airport.
- Section 3 provides the results of our analysis for the net economic impact of Gatwick Airport.
- Section 4 summarises the results and concludes.

2 Economic footprint

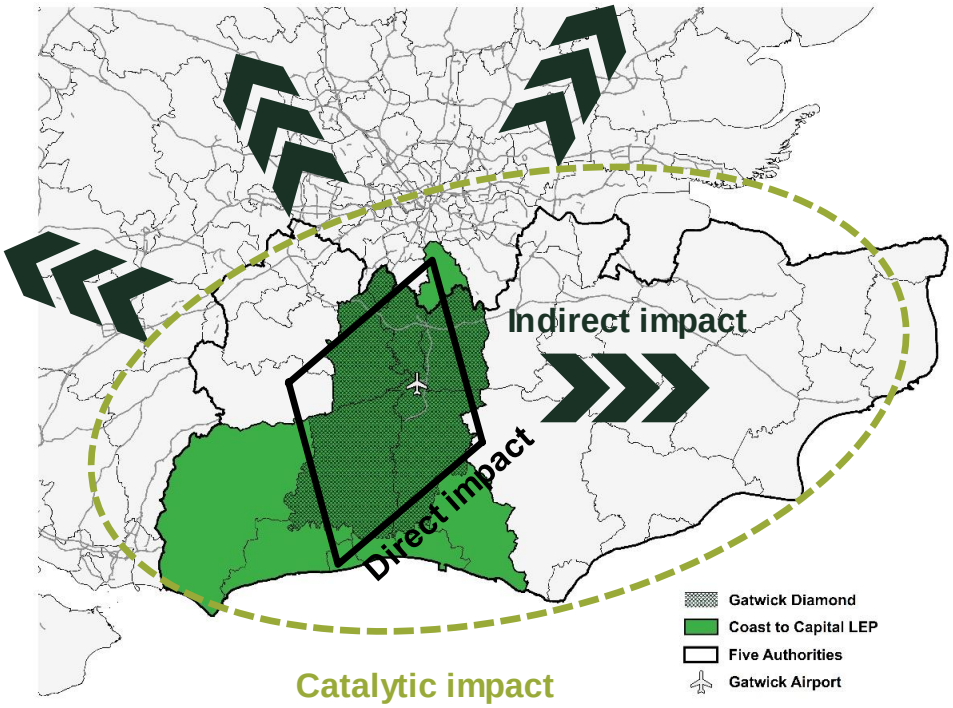
In this section, we focus on the economic footprint of Gatwick Airport as a whole. An economic footprint provides a measure of the scale of economic activity supported by a firm, site, sector or economy. This activity is typically measured by considering employment or GVA.

It consists of three main components:

1. the **direct footprint**, which is the employment and GVA directly associated with the firm, site, sector or economy. In the case of Gatwick Airport, it is split into the footprint of both GAL and other firms that operate on the Gatwick Airport site;
2. the **indirect footprint**, which is the additional employment and GVA supported via the supply chains of the firms located at Gatwick Airport (i.e. in the direct footprint);
3. the **catalytic footprint**, which is the additional employment or GVA supported by firms choosing to locate or expand in South East England because of the connectivity that Gatwick Airport offers.

Figure 2.1 illustrates the geographic reach of each impact: direct impacts are restricted to the Gatwick Diamond; indirect impacts cover the whole of the UK, since Gatwick suppliers can be located anywhere in the country and abroad; and catalytic impacts are located in the wider study area, since they are related to the connectivity that the airport provides in the local area.

Figure 2.1 Geography of footprint impacts



Source: Oxera.

Each of these impacts are discussed in more detail in the following subsections. In each subsection, we provided a short overview of the impact. A

more detailed description of each impact can be found in section 6 of Oxera's report supporting Gatwick's DCO application.

2.1 Direct footprint

The **direct footprint** is the employment and GVA directly associated with the firm, site, sector or economy concerned. In the case of Gatwick Airport, we include both GAL and other firms that operate on the Gatwick Airport site.

The direct GVA is equal to the sum of profits and worker compensation for activities located on the site of Gatwick Airport.[8] For GAL itself, this information has been obtained from GAL and publicly available information (i.e. GAL's 2020 mid-year financial update). For other firms on site, ICF on-site employment long-term forecasts were used as a baseline for Oxera to estimate direct employment in 2019 and 2020.[9] These direct employment estimates were then combined with GAL survey data[10] on salaries and with ONS data to estimate worker compensation and GVA.[11] For subsequent years, we assume that direct GVA and employment grow in line with ICF's forecasts of total direct on-site employment by occupation.

Figure 2.2 presents a breakdown of job occupations on site according to skills in 2020 following the impact of the pandemic.

Figure 2.2 Direct employment skills breakdown (2020 estimates)

Note: Direct employment statistics in the chart exclude furloughed staff, as discussed in subsection 2.1.1 below.

Source: ICF data, Oxera analysis.

[8] Office for National Statistics (2019), 'Regional accounts methodology guide: June 2019', section 3.
[9] ICF provided long-term employment forecasts (2026 to 2047) in support to the Northern Runway Project DCO application. Oxera used the implied elasticity of passenger traffic to direct employment in these forecasts to estimate direct employment in the short term consistently with ICF's approach.
[10] Gatwick Airport Limited (2016), 'Gatwick Employer and Travel to Work Survey 2016', Table 7.
[11] Office for National Statistics (2020), UK input-output analytical tables (2016 data).

2.1.1 Impact of the COVID-19 pandemic on direct footprint

The COVID-19 pandemic had a significant impact on the activity at Gatwick Airport, where passenger numbers fell by up to 90%,[12] as shown in Figure 1.1. As many businesses around the UK have done, GAL and other companies present on site at Gatwick have relied on the UK government's Coronavirus Job Retention Scheme (hereafter, the 'furlough scheme').[13] This furlough scheme allows companies to claim compensation for 80% of the salary of furloughed staff (subject to a cap) and thereby to preserve employment without penalising firms while activity is low.

As per ONS guidelines,[14] furloughed staff and the corresponding furlough salary payments should be excluded from Gatwick Airport's economic footprint since they correspond to government subsidies on production. Using information obtained from GAL on the share of furloughed employees, we have estimated Gatwick Airport's footprint in 2020 while excluding furloughed staff. For non-GAL on-site employment and absent any relevant information on the implementation of furlough, we have assumed the same proportion of furloughed staff as GAL.

According to our estimations, the furlough scheme compensated for close to £300m in wage payments at companies located on the Gatwick Airport campus in 2020.[15] These payments not only supported companies and preserved local employment but also supported the local economy as they directly compensated for wages and the equivalent spending that could have been forgone otherwise.

2.2 Indirect footprint

The **indirect footprint** refers to the additional employment and GVA supported throughout the UK via the supply chains of the firms located at Gatwick Airport.

We estimate indirect GVA based on the sum of profits and employee compensation generated throughout the UK from the supply-chain spending of firms on site at Gatwick Airport.

Unlike the direct economic footprint (which, by definition, is all contained on site at Gatwick Airport), the indirect footprint will be spread across a wide geographic area. In order to estimate the local economic footprint for each of our three study areas, it is necessary to form a view of how much indirect activity would be retained locally and how much would 'leak' out into the rest of the UK. To do this, we use two pieces of evidence:

[12] The overall reduction in passenger volumes in 2020 was 78% in the year to December 2020 from the previous calendar year, but at times during the year the reduction was substantially greater.
[13] UK Government (2020), 'Check if you can claim for your employees' wages through the Coronavirus Job Retention Scheme', https://www.gov.uk/guidance/claim-for-wage-costs-through-the-coronavirus-job-retention-scheme, accessed on 26 February 2021.
[14] Office for National Statistics (2020), 'Coronavirus and the effects on UK GDP', https://www.ons.gov.uk/economy/nationalaccounts/uksectoraccounts/articles/coronavirusandtheeffectsonukgdp/2020-05-06#the-treatment-of-the-cjrs-and-seiss-in-gdp, accessed 8 February 2021.
[15] This estimate corresponds to furlough wage subsidies paid in 2020 to GAL and other companies located at Gatwick Airport. We assumed furlough payments would be provided at 80% of the average salary per employee (below the £3,125 monthly cap per employee for claims), excluding National Insurance and employer pension contributions as indicated in the furlough scheme guidelines.
UK government (2020), 'Calculate how much you can claim using the Coronavirus Job Retention Scheme', https://www.gov.uk/guidance/calculate-how-much-you-can-claim-using-the-coronavirus-job-retention-scheme, accessed 8 February 2021.

- previous research which presents a disaggregation of Gatwick Airport's indirect GVA[16] into a share corresponding to the Gatwick Diamond (24%), a share for the Coast to Capital LEP (14%), and a share for the rest of the UK. We use this evidence from 2016 to benchmark our indirect GVA disaggregation;
- ONS data on GVA for each Local Authority District (LAD) in the UK.[17] This data allows us to calculate the distribution of GVA across LADs in each study area to distribute the total indirect footprint.

2.2.2 Impact of the COVID-19 pandemic on indirect footprint

The pandemic has dramatically reduced activity at the airport and, as a result, indirectly affected the airport's supply chain, since a reduction in on-site activity would be matched by a proportional reduction in supply-chain expenditure. As we have excluded furloughed staff from our direct footprint to reflect the actual level of activity on site, the indirect impact also reflects a proportional fall in supply-chain expenditure in 2020. We present these estimates in section 2.4 below.

2.3 Catalytic footprint

We estimate the catalytic footprint as follows:

- first, we calculate the total net impact of the existence of Gatwick Airport in the local area using the results of research conducted for GAL in support of the DCO application. The estimated impact is applied to a total employment baseline for the three study areas from Cambridge Econometrics forecasts that have been adjusted by Oxera for the impact of COVID-19 using Office for Budget Responsibility (OBR) unemployment forecasts[18] (stage 1);
- we then convert it into a total employment footprint by adding back jobs that were filled by switching employers within the area (stage 2). Net employment impacts do not include these jobs since they offset one another within the area (i.e. when an employee within the Gatwick Diamond changes jobs to work on site at Gatwick Airport, the overall number of people employed is the same). For consistency with the direct and indirect footprint estimates, it is necessary to add back estimated job switching within the area to obtain the total footprint impact.[19]
- the final catalytic footprint is then the difference between the total employment footprint and the direct/indirect footprints (stage 3).

From the catalytic employment footprint, we can then estimate the catalytic GVA footprint using the average GVA per job in the South East. It is important to note that because the catalytic footprint is partly based on forecasts of the wider employment picture in the local areas, these estimates are particularly uncertain given the difficulties in forecasting the recovery from the ongoing pandemic and its long-term impacts.

[16] Oxford Economics (2017), 'The Economic impact of Gatwick Airport', p. 13.
[17] Office for National Statistics (2018), 'GVA (Income approach) by LAD', December.
[18] Office for Budget Responsibility (2020), 'Fiscal sustainability report', July.
[19] The economic footprint represents all activity associated with a project or activity, irrespective of whether it is displaced from elsewhere.

2.3.3 Impact of the COVID-19 pandemic on catalytic footprint

As described in the introduction, the catalytic footprint reflects the employment and GVA supported by firms choosing to locate or expand in the local area because of the connectivity that Gatwick Airport offers. While activities for some firms have been dramatically affected by the pandemic (e.g. hotels, restaurants, and other tourist-related activities), others will have been able to sustain some level of activity (e.g. international firms' headquarters).[20]

This heterogeneity in the impact of the pandemic on the local economy introduces a measure of uncertainty in the airport's catalytic footprint. It also indicates that the usual relationship between passenger traffic (i.e. activity at the airport) and local employment might not accurately reflect the impact of the pandemic.

To reflect this, we have estimated a range for the catalytic footprint using two approaches.

1. Furlough-adjusted baseline employment

   For this approach, we assume that the usual relationship between passenger volumes and local employment holds but adjust the local employment data to reflect the implementation of furlough in the region. We therefore apply the ONS guidelines on furlough[21] and exclude furloughed staff from the airport's employment impact in the local economy. As ONS statistics show,[22] on average, close to 11% of all employees in the South East were on furlough since the second quarter of 2020.

2. Constant ratio of catalytic to direct and indirect employment

   For this approach, we assume that the relationship between passenger volumes and local employment did not hold in 2020 due to the effects of the pandemic on local activity. To estimate the catalytic footprint, we use a benchmark ratio for the number of catalytic jobs per jobs at Gatwick Airport and in its supply chain. Using this benchmark ratio, we estimate the number of catalytic jobs corresponding to the estimated direct and indirect jobs in 2020. From this estimated catalytic employment footprint, we can then estimate the catalytic GVA footprint using the average GVA per job in the South East.

This second approach is the most conservative as it reflects more accurately the significant impact of the pandemic on tourist-related activity in the region. Together, these two approaches provide a range of values for the catalytic footprint (GVA and employment), which we report in the next section along with the other footprint estimates.

2.4 Footprint results

Table 2.1 summarises the results of the footprint analysis.

[20] Employment estimates for the catalytic footprint are produced on a workplace basis (i.e. how many people are employed by a company located in the local area). Employment practices such as home working which geographically displaced employment and intensified as a result of health and safety measures related to the pandemic would not therefore have an effect on the level of employment estimated by this impact.
[21] Office for National Statistics (2020), 'Coronavirus and the effects on UK GDP', https://www.ons.gov.uk/economy/nationalaccounts/uksectoraccounts/articles/coronavirusandtheeffectsonukgdp/2020-05-06#the-treatment-of-the-cjrs-and-seiss-in-gdp, accessed 8 February 2021
[22] Office for National Statistics (2021), 'Coronavirus Job Retention Scheme statistics: January 2021', https://www.gov.uk/government/statistics/coronavirus-job-retention-scheme-statistics-january-2021, accessed 8 February 2021.

Despite the effects of the pandemic on activity, Gatwick Airport generated £2.1bn in GVA and between 36,700 and 72,200 jobs in the UK. Of these jobs, 33,300 correspond to the Five Authorities area in 2020 including 7,700 jobs on site at Gatwick Airport. Compared to the pre-COVID benchmark for 2019, the pandemic has had a substantial impact on the airport's activity, as the total footprint was reduced by up to 70%.

As per ONS guidelines, furloughed employees have been excluded from the economic impact assessment of the airport and its related activities. Staff on furlough are employed but do not contribute to the airport's economic activity as most of their wages are paid by the government rather than the employer. When including furloughed employees, approximately 19,400 people were employed on site at Gatwick Airport in 2020 (up from 7,700 employees excluding furlough). We estimate that there are 11,000 indirect employees active in the supply chain of on-site firms and there could be a further 16,300 indirect furloughed employees in those supply chains, although there is considerable uncertainty on this estimate.

It is estimated that by 2028, Gatwick Airport will be generating £9.3bn in GVA and approximately 139,700 jobs due to its rebounding activity.

Table 2.1 Economic footprint (GVA and employment)

	2019	2020	2024	2028
		GVA		
Direct footprint	**£1,592m**	**£385m**	**£1,558m**	**£1,860m**
of which GAL	£582m	£55m	£495m	£591m
of which non-GAL	£1,010m	£330m	£1,063m	£1,269m
Indirect footprint	**£2,762m**	**£668m**	**£2,702m**	**£3,228m**
of which Gatwick Diamond	£662m	£160m	£648m	£773m
of which Coast to Capital LEP	£1,040m	£252m	£1,018m	£1,216m
of which Five Authorities area	£1,925m	£466m	£1,884m	£2,250m
Catalytic footprint	**£4,016m**	**£1,085m–£3,239m**	**£2,519m**	**£4,255m**
of which Gatwick Diamond	£2,030m	£543m–£1,622m	£1,261m	£2,139m
of which Coast to Capital LEP	£3,382m	£898m–£2,682m	£2,094m	£3,562m
of which Five Authorities area	£4,016m	£1,085m–£3,239m	£2,519m	£4,255m
Total footprint	**£8,369m**	**£2,139m–£4,293m**	**£6,779m**	**£9,343m**
of which Gatwick Diamond	£4,284m	£1,089m–£2,167m	£3,466m	£4,773m
of which Coast to Capital LEP	£6,014m	£1,535m–£3,319m	£4,670m	£6,639m
of which Five Authorities area	£7,533m	£1,936m–£4,090m	£5,960m	£8,366m
		Employment		
Direct footprint	**24,100**	**7,700**	**24,000**	**27,100**
of which GAL	2,600	800	2,400	2,700
of which non-GAL	21,500	7,000	21,600	24,400
Indirect footprint	**45,900**	**11,000**	**43,000**	**48,600**
of which Gatwick Diamond	11,000	2,600	10,300	11,600
of which Coast to Capital LEP	17,300	4,200	16,200	18,300
of which Five Authorities area	32,000	7,700	29,900	33,900
Catalytic footprint	**66,800**	**17,900–53,500**	**40,000**	**64,000**
of which Gatwick Diamond	33,800	9,000–26,800	20,000	32,200
of which Coast to Capital LEP	56,300	14,800–44,300	33,300	53,600
of which Five Authorities area	66,800	17,900–53,500	40,000	64,000
Total footprint	**136,900**	**36,700–72,200**	**107,000**	**139,700**
of which Gatwick Diamond	68,900	19,400–37,200	54,300	70,900
of which Coast to Capital LEP	97,700	26,700–56,200	73,400	99,000
of which Five Authorities area	122,900	33,300–68,900	93,900	125,000

Note: Numbers may not sum due to rounding. 2020 prices. The total indirect footprint impact corresponds to the impact throughout the UK (including outside of the Five Authorities area).

Source: Oxera analysis.

Finally, to put in context the scale of the value added generated in the wider local area (Gatwick Diamond, Coast to Capital LEP and Five Authorities area) and in the UK as a whole, we translate these GVA estimates into equivalent tax receipts, and then consider how many new primary or secondary school places and nurse or police positions could be funded through these tax receipts. It should be noted that this calculation should be considered as illustrating the order of magnitude of the economic footprint rather than as indicating the actual amounts of tax paid by firms in Gatwick Airport's footprint, which will depend on a wide range of factors.

We perform the four steps described below to estimate these illustrations:

1. we estimate the share of tax take per GVA by calculating the ratio between the total HMRC tax receipts in 2020[23] and GVA for the UK as a whole;[24]
2. with this ratio, we convert GVA generated by Gatwick Airport, as reported in this section, into the corresponding tax take;
3. separately, we gather information on:
   - the cost of opening a primary or secondary school place for a year;[25]
   - employee compensation (wage and pensions) for a nurse for a year;[26]
   - employee compensation (wage and pensions) for a police officer for a year;[27]
4. finally, we divide the equivalent tax take calculated from GVA for the airport by the cost of each item to obtain the number of primary or secondary school places and nurse or police positions corresponding to the level of GVA associated with the airport.

Overall, GVA generated by the airport across the UK is comparable to:

- opening 56,900 primary school places or employing 18,200 nurses for a year in 2020;
- opening 248,400 primary school places or employing 79,500 nurses for a year by 2028.

The detailed statistics are reported in Table A1.1 in Appendix A1.

[23] HM Revenue & Customs (2020), 'HM Revenue & Customs (HMRC) Tax Receipts & National Insurance Contributions'.
[24] Office for National Statistics (2020), 'Gross Value Added (Average) at basic prices: CP SA £m', December.
[25] National Audit Office (2017), 'Capital funding for schools', p. 11.
[26] NHS Trusts and CCGs (2019), 'NHS staff earnings estimates to June 2019'. NHS Employers (2019), 'Pension contributions and tax arrangements', March.
[27] Home Office (2020), 'Home Office evidence to the Police Remuneration Review Body: 2020/21 pay round'.

3 Net economic impacts

In this section, we discuss the 'net' economic impact of Gatwick Airport on the three local study areas (Gatwick Diamond, Coast to Capital, Five Authorities).

We assess how the airport drives greater productivity, and the mechanisms by which this occurs. To do this, we compare Gatwick's current operations with a counterfactual, in which we imagine that there is no airport. We estimate the effect on employment of the activity generated by the airport in line with standard practice in economic appraisal.[28]

As shown in Table 3.1, the net impacts analysis focuses on three impacts: impacts on labour supply, productivity improvements, and catalytic impacts. We discuss each of these in turn in the following subsections.

Table 3.1 Net impacts overview

	Type of impact	Analysis
Net economic impacts	Labour supply	Net economic impacts on jobs in the study area (i.e. the net increase in local employment and GVA as a result of the presence of Gatwick)
	Job productivity	Additional productivity generated by jobs related to airport activities (i.e. the increase in GVA associated with workers switching jobs to work in activities related to the airport)
	Catalytic net impacts	Net impact of firms' location or expansion decisions as a result of the presence of the airport

Source: Oxera.

3.1 Labour supply

There are currently approximately 7,700 employees working at Gatwick Airport[29] and a further estimated 7,700 employees (indirect jobs) working in the Five Authorities area (e.g. in catering, cleaning, engineering). In order to capture the effect of the presence of Gatwick Airport in reality, we conduct a thought experiment involving a counterfactual scenario in which the airport is not there.

In the absence of Gatwick Airport, current employees associated with the airport's activities in the local area would be affected in a number of ways. It is possible to categorise a decrease in labour demand as one of five effects:

- increase in unemployment;
- increase in economic inactivity;
- increase in out-migration (from the study area);
- increase in out-commuting (from the study area);
- internal job switching (within the study area).

[28] Department for Transport (2018), 'TAG UNIT A2.3 Employment effects', Transport Analysis Guidance (TAG), May.
[29] As discussed in sub-section 2.4, this figure excludes furloughed staff employed on site at Gatwick Airport as they were not actively working at the time and therefore did not contribute to the airport's economic impact. Approximately 19,400 people were employed on site at Gatwick Airport in 2020 when furloughed staff are included.

The relative importance of each impact depends on the characteristics of the labour market in the local area. Depending on which sector the jobs are created in, what occupational or qualification level they correspond to, and which area is concerned, some of these effects might be stronger than others. We have reviewed relevant papers on the local employment effects of labour market shocks.[30]

Evidence gathered from our literature review, combined with Gatwick Airport's direct and indirect employment numbers from the footprint analysis in section 2, allows us to estimate the number of additional jobs generated through airport-related activities that would not otherwise exist within the Five Authorities area.[31]

As the analysis focuses on the local impact of Gatwick Airport (i.e. how the additional jobs created by it would be sourced within the study area), the whole labour supply impact is captured within the Five Authorities area.

3.2 Job productivity

We estimate that over half (62%) of Gatwick Airport's direct and indirect employment in the Five Authorities area would remain in the area in the absence of the airport. Additionally, direct jobs at Gatwick Airport have a higher productivity than the average output for jobs in South East England in a normal business environment.

To estimate the productivity of jobs offered in South East England in the absence of the airport, we compared the GVA per Gatwick Airport direct job and the GVA per job in the South East England region.

Due to the airport's low profitability in 2020 combined with current staff retention policies, productivity on site has been lower than the average output in the region. This suggests that in 2020, Gatwick generated a net loss of productivity in the region. As traffic recovers in subsequent years and profitability increases with activity, employment at Gatwick contributes to a net increase in productivity within the region.

3.3 Catalytic net impacts

Net catalytic impacts arise when firms choose to expand or locate close to the airport because of the connectivity created by it. In the absence of the airport, many of these additional jobs would be expected to locate close to another airport instead.[32]

The three stages below summarise the steps used to calculate net catalytic impacts.

- First, we calculate the local employment impact of the airport as passenger volumes generate jobs in the Gatwick Diamond and the wider area. This figure represents the totality of the employment impact regardless of its source.

[30] For further details, please refer to Oxera (2020), 'Economic impact of Gatwick's Norther Runway Project', March.
[31] GVA per job for each category of employment in the study area (the Five Authorities area) is used to convert the estimated employment outcomes into GVA figures. Direct GVA per job is calculated as the total direct GVA divided by the number of direct jobs, and indirect GVA per job corresponds to indirect GVA divided by the number of indirect jobs (using the South East average GVA per job, as discussed in section 2).
[32] Calculated as the residual corresponding to the number of workers who would change jobs within the study area to work at Gatwick Airport.

- We also calculate the spillover effects on local employment of reduced passenger volumes at other London-area airports close to the study area (i.e. Heathrow and London City). In a counterfactual scenario, passenger numbers for other London-area airports (Heathrow, London City, Stansted, Luton and Southend) would have been higher absent any capacity at Gatwick Airport as overall capacity in London adjusts. Absent the airport, higher passenger volumes at other airports would generate additional activity, which would in turn attract workers from the study area who would take up jobs at or around other London airports. This second stage evaluates the number of jobs that would have been lost in the local area (within the Five Authorities) to the London area without Gatwick Airport. The total employment impact of the airport is then the difference between the direct and spillover employment impacts on the local area.
- The last stage, once we have estimated the net total employment impact of the airport, is to calculate the net catalytic impact as the difference between total employment impacts and labour supply impacts in the study area.

We can then estimate the net catalytic GVA from our catalytic employment estimate using average GVA per job in the South East. As discussed in subsection 3.2, the average GVA per job in the South East is a conservative assumption, given that catalytic jobs (e.g. jobs in high-value services) are likely to be more productive than average.

As discussed in subsection 2.3.3, we have estimated a range for the net catalytic impact using two distinct approaches to reflect the uncertainty around the impact of the COVID-19 pandemic on the local economy. As was done for the catalytic footprint estimates, we report catalytic net impacts as a range of values corresponding to these two approaches.

3.4 Net economic impact results

In this subsection, we summarise the net estimates by showing: the net impacts split across the three impacts (labour supply, productivity and catalytic). The job productivity impact represents a smaller share of the overall net impacts (£32m out of a £6.9bn total in 2028), which are mostly split between labour supply impacts (£1.7bn in 2028) and net catalytic impacts (£5.2bn). The impact of the airport increases over time with the recovery from the effects of the COVID pandemic on traffic, as does its overall net impact, which increases from £1.6bn in 2020 (down from £6.1bn in 2019) to £6.9bn in 2028.

Table 3.2 summarises the results of the net economic impacts analysis.

Table 3.2 Net economic impact (GVA and employment)

	2019	2020	2024	2028
		GVA		
Labour supply impact	**£1,392m**	**£363m**	**£1,382m**	**£1,652m**
of which Gatwick Diamond	£1,013m	£271m	£1,011m	£1,209m
of which Coast to Capital LEP	£1,126m	£299m	£1,122m	£1,342m
of which Five Authorities area	£1,392m	£363m	£1,382m	£1,652m
Job productivity impact	**£72m**	**-£52m**	**£26m**	**£32m**
Net catalytic footprint	**£4,627m**	**£1,318m–£2,597m**	**£3,699m**	**£5,194m**
of which Gatwick Diamond	£2,126m	£597m–£1,177m	£1,680m	£2,369m
of which Coast to Capital LEP	£3,829m	£1,070m–£2,108m	£3,018m	£4,269m
of which Five Authorities area	£4,627m	£1,318m–£2,597m	£3,699m	£5,194m
Total footprint	**£6,091m**	**£1,630m–£2,908m**	**£5,107m**	**£6,877m**
of which Gatwick Diamond	£3,211m	£817m–£1,396m	£2,717m	£3,610m
of which Coast to Capital LEP	£5,027m	£1,317m–£2,355m	£4,166m	£5,642m
of which Five Authorities area	£6,091m	£1,630m–£2,908m	£5,107m	£6,877m
		Employment		
Labour supply impact	**22,500**	**6,400**	**21,700**	**24,600**
of which Gatwick Diamond	16,200	4,800	15,900	17,900
of which Coast to Capital LEP	18,100	5,300	17,600	19,900
of which Five Authorities area	22,500	6,400	21,700	24,600
Net catalytic footprint	**77,000**	**21,800–42,900**	**58,800**	**78,100**
of which Gatwick Diamond	35,400	9,900–19,400	26,700	35,600
of which Coast to Capital LEP	63,700	17,700–34,800	48,000	64,200
of which Five Authorities area	77,000	21,800–42,900	58,800	78,100
Total footprint	**99,500**	**28,100–49,200**	**80,500**	**102,700**
of which Gatwick Diamond	51,600	14,700–24,300	42,600	53,600
of which Coast to Capital LEP	81,800	23,000–40,100	65,600	84,200
of which Five Authorities area	99,500	28,100–49,200	80,500	102,700

Note: Numbers may not sum due to rounding. 2020 prices.

Source: Oxera analysis.

4 Conclusion

Gatwick Airport has a sizeable local economic footprint, despite the significant reduction in air traffic resulting from COVID-19, and continues to make a substantial impact on the economy of the surrounding area. This includes direct activity on site associated with servicing additional air traffic, indirect activity across the supply chain and businesses relocating or expanding in the local area thanks to improved connectivity. We estimate that this economic value supported 36,700 jobs and £2.1bn of GVA in 2020. This will increase as traffic volumes recover—rising to 139,700 jobs and £9.3bn of GVA generated by 2028. This future employment footprint is comparable to 79,500 nurse positions or 248,400 primary school places in scale.

One common critique of the 'footprint' measures of economic activity outlined above is that they do not reflect the true economic benefits of an airport because the people employed at the airport would, if there were no airport, be employed in other activities. However, even when taking these effects into account, our analysis suggests that Gatwick Airport has a significant net contribution to the local area. We estimate that 28,100 jobs with an annual GVA of £1.6bn were generated in 2020 through increased productivity, greater output and increases in labour supply—rising to 102,700 jobs and £6.9bn of GVA in 2028.

A1 Contextualising Gatwick's impact in the local area

As discussed in section 2.4, we have produced statistics that would put in context the scale of the value added generated in the wider local area (Gatwick Diamond, Coast to Capital LEP and Five Authorities area) and in the UK as a whole.

Table A1.1 summarises these statistics (estimated tax take, primary and secondary school places, nurse and police officer positions) for each year of analysis. Although it should be noted that these benchmarks are only indicative of the scale of the airport and are generated to contextualise the footprint of the airport.

Table A1.1 Contextualising Gatwick airport's total GVA footprint

	2019	2020	2024	2028
Estimated tax take (UK-wide)	***£2,674m***	**£683m–£1,372m**	***£2,166m***	***£2,986m***
of which Gatwick Diamond	*£1,369m*	£348m–£693m	*£1,108m*	*£1,525m*
of which Coast to Capital	*£1,922m*	£491m–£1,061m	*£1,492m*	*£2,121m*
of which Five Authorities	*£2,407m*	£619m–£1,307m	*£1,905m*	*£2,673m*
Primary school places (UK-wide)	***222,500***	**56,900–114,100**	***180,200***	***248,400***
of which Gatwick Diamond	*113,900*	28,900–57,600	*92,200*	*126,900*
of which Coast to Capital	*159,900*	40,800–88,200	*124,200*	*176,500*
of which Five Authorities	*200,300*	51,500–108,700	*158,500*	*222,400*
Secondary school places (UK-wide)	***161,700***	**41,300–82,900**	***131,000***	***180,500***
of which Gatwick Diamond	*82,800*	21,000–41,900	*67,000*	*92,200*
of which Coast to Capital	*116,200*	29,700–64,100	*90,200*	*128,300*
of which Five Authorities	*145,500*	37,400–79,000	*115,200*	*161,600*
Nurse positions (UK-wide)	***71,200***	**18,200–36,500**	***57,700***	***79,500***
of which Gatwick Diamond	*36,500*	9,300–18,400	*29,500*	*40,600*
of which Coast to Capital	*51,200*	13,100–28,200	*39,700*	*56,500*
of which Five Authorities	*64,100*	16,500–34,800	*50,700*	*71,200*
Police officer positions (UK-wide)	***56,300***	**14,400–28,900**	***45,600***	***62,900***
of which Gatwick Diamond	*28,800*	7,300–14,600	*23,300*	*32,100*
of which Coast to Capital	*40,500*	10,300–22,300	*31,400*	*44,700*
of which Five Authorities	*50,700*	13,000–27,500	*40,100*	*56,300*

Note: Benchmarks are reported in units (i.e. number of school places or nurse/police positions). Estimated tax take is reported in 2020 prices.

Source: Oxera.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