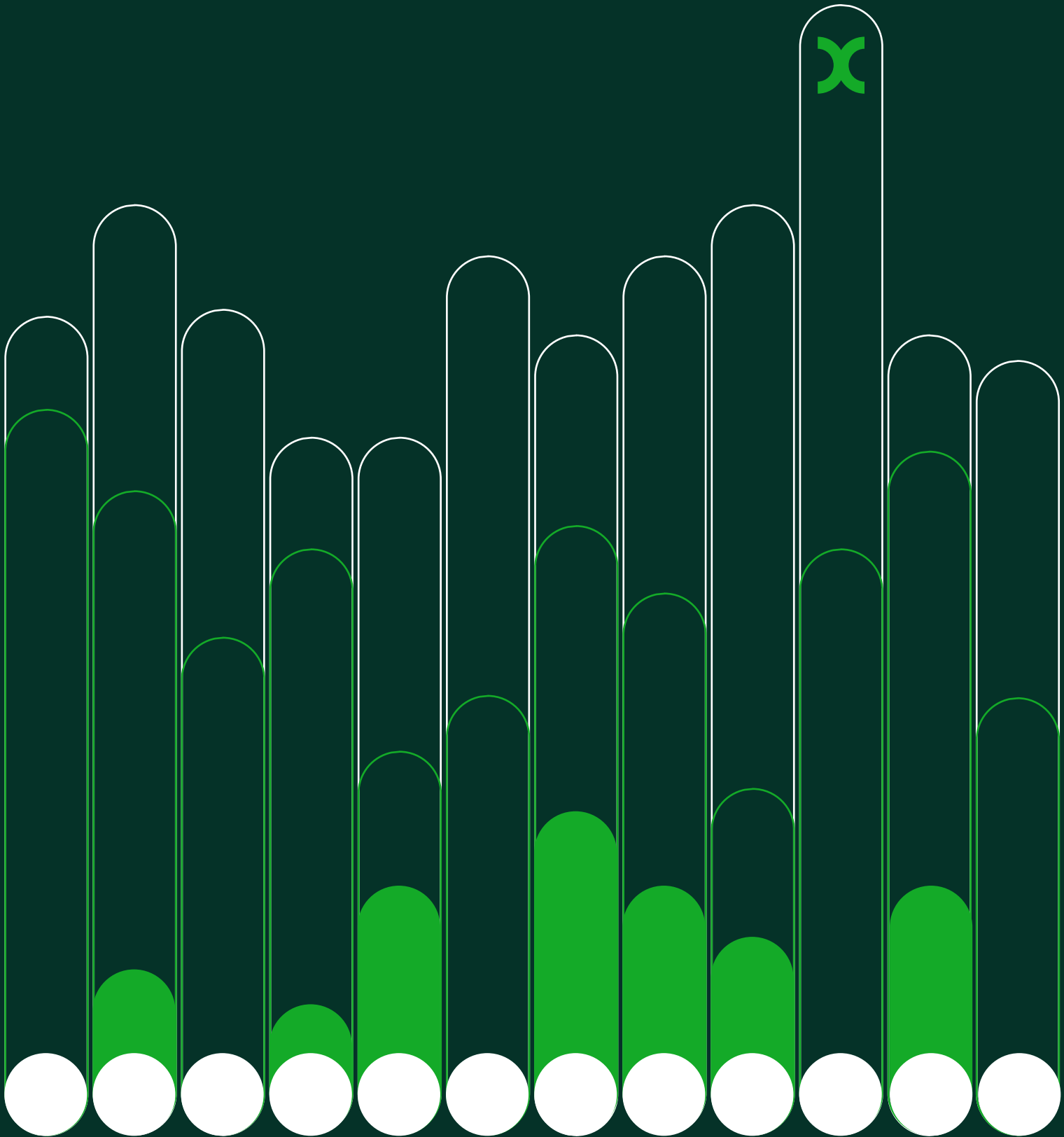


# Local economic impact of London Gatwick: 2023

09 April 2024



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## Executive summary

This report presents Oxera's assessment of the economic impact of London Gatwick in 2023.

The economic impact is made up of the direct, indirect and induced footprints and the catalytic effect (defined in the table below) and provides a measure of the scale of economic activity associated with London Gatwick. It is measured as the total number of jobs<sup>1</sup> and gross value added (GVA) supported by the airport.

### Components of the economic impact

Impact	Description
Direct footprint	Employment and GVA associated with activities at the London Gatwick campus. This covers both Gatwick Airport Limited (GAL) and the other firms that operate on site (e.g. those that provide airline staff, airport management, immigration and customs staff, and retail staff).
Indirect footprint	Employment and GVA associated with the activity of firms in London Gatwick's supply chain (e.g. aircraft parts manufacturers and food and beverage suppliers).
Induced footprint	Employment and GVA associated with the spending of wages by direct and indirect employees (e.g. at restaurants and hairdressers).
Catalytic effect	Employment and GVA associated with firms choosing to locate or expand near the airport because of the business opportunities that it offers (e.g. a professional services firm locating in the area in order to benefit from the international connectivity that the airport offers).

Note: Employment is measured by headcount.  
Source: Oxera.

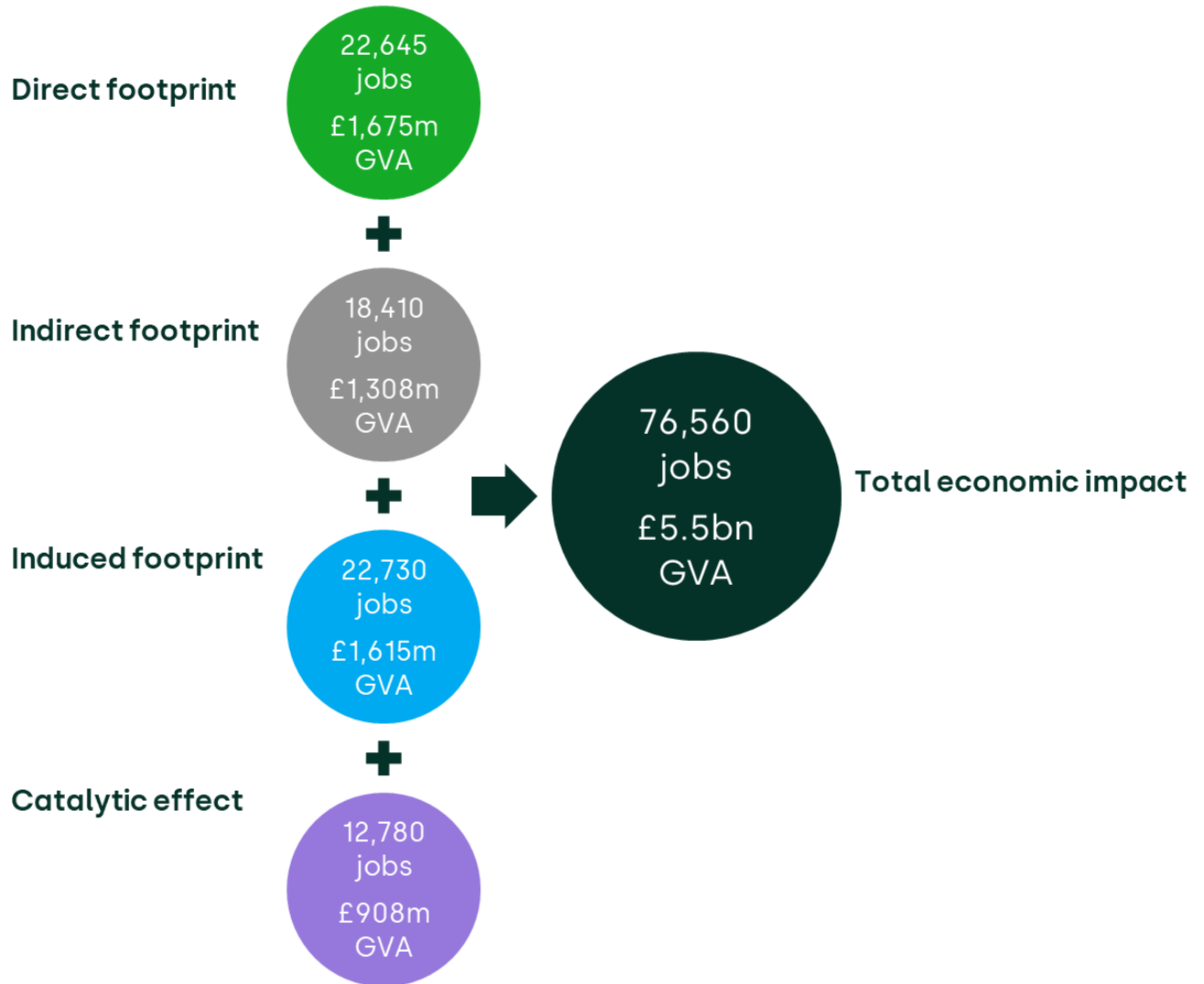
The methodology that we have used to estimate the economic impact is based on analysis conducted in the context of the Northern Runway Project (NRP) Development Consent Order (DCO) application. However, in some instances we have made adjustments to reflect the assessment of the economic impact of London Gatwick as a whole.<sup>2</sup>

Despite the significant impact of the COVID-19 pandemic on the aviation sector and the economy more broadly, in 2023 London Gatwick's contribution to the UK economy almost reached 2019 levels (the pre-COVID-19 benchmark), as shown in the figure below.

<sup>1</sup> Measured by headcount.

<sup>2</sup> The economic footprint analysis conducted for the NRP DCO application assesses the footprint of the NRP itself (i.e. the difference in the activity supported by the airport with the NRP relative to the activity supported by the airport without the NRP), rather than the footprint of the airport as a whole.

## Total UK economic impact of London Gatwick in 2023



Note: Employment is measured by headcount. Employment figures are rounded to the nearest five and GVA figures are presented in 2022 prices. The numbers presented in the figure show the total economic impact of London Gatwick on the UK economy. The attribution of the economic footprint to the local area surrounding the airport is discussed in more detail in the main report. Figures may not sum due to rounding. Source: Oxera.

In summary, London Gatwick supported 76,560 jobs in the UK in 2023, which is the sum of the direct footprint (22,645), indirect footprint (18,410), induced footprint (22,730) and catalytic effect (12,780).<sup>3</sup> This is equivalent to the creation of approximately £5.5bn in GVA by London Gatwick in the UK in 2023.<sup>4</sup> The economic footprint of London Gatwick has almost reached the estimated footprint for 2019, which was 85,347 jobs and £6.1bn in GVA. These figures highlight London Gatwick's fast recovery from the COVID-19 pandemic and its significant contribution to the economy.

<sup>3</sup> Figures are rounded to the nearest five and may not sum due to rounding. Employment is measured by headcount.

<sup>4</sup> GVA figures are presented in 2022 prices.

## 1 Introduction

---

This report presents the economic impact of London Gatwick in 2023. The economic impact is a measure of the economic activity, both on site and off site,<sup>5</sup> that is supported by London Gatwick, and consists of direct, indirect and induced footprints, and catalytic effects.<sup>6</sup> Our methodology to estimate the economic impact is based on analysis conducted in the context of the Northern Runway Project (NRP) Development Consent Order (DCO) application.

We have assessed the economic impact of London Gatwick with reference to four sub-national areas as follows.

- The smallest area, known as the **Gatwick Diamond**, comprises the seven local authority districts (LADs) around the airport (Epsom and Ewell, Mole Valley, Reigate and Banstead, Tandridge, Crawley, Mid Sussex, and Horsham).
- The **Gatwick Airport Labour Market Area** comprises the 14 LADs that provide a large proportion of the airport's direct labour demand:<sup>7</sup> Mole Valley, Reigate and Banstead, Tandridge, Crawley, Mid Sussex, Horsham, Croydon, Brighton and Hove, Lewes, Worthing, Arun, Adur, Wealden, and Eastbourne.
- The largest study area, known as the **Six Authorities Area**, is defined by the border of the 'local area' on which the airport has an impact. It covers the county council areas of West Sussex, East Sussex, Surrey, and Kent,<sup>8</sup> the Unitary Authority of Brighton and Hove, and the London Borough of Croydon.
- The **rest of the UK** comprises the UK excluding the Six Authorities Area as defined above.

The geographic scope of the three local study areas—the Gatwick Diamond, the Gatwick Airport Labour Market Area, and the Six Authorities Area—is shown in Figure 1.1 below.

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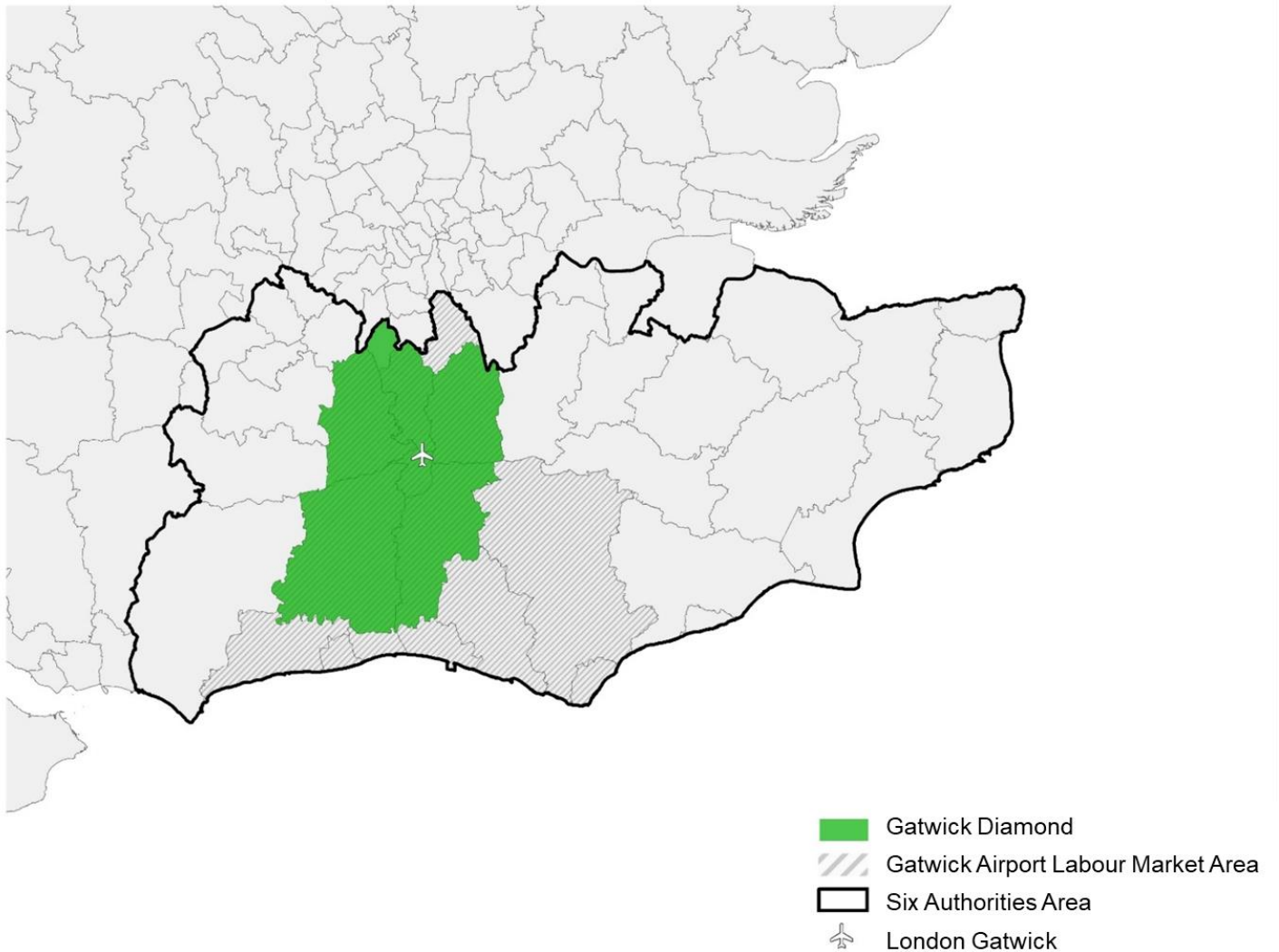
<sup>5</sup> 'On site' refers to activity that occurs on the London Gatwick campus. 'Off site' refers to activity associated with London Gatwick that occurs off the airport campus, such as activity within the supply chain of the airport.

<sup>6</sup> See section 2 and section 3 for more information.

<sup>7</sup> This is estimated based on the residency of direct employees from passholder data for the airport site for 2023. In 2023, c. 87% of employees lived in the 14 LADs that make up the Gatwick Airport Labour Market Area.

<sup>8</sup> It does not include the Unitary Authority of Medway, which is run by Medway Council and is independent of Kent County Council.

Figure 1.1 Local study areas



Source: Oxera.

It is important to note that, over the course of 2023, both the aviation industry and the UK economy were still recovering from the disruptions caused by the COVID-19 pandemic. During the pandemic, London Gatwick was required to adapt its operations in response to public health measures and travel restrictions that prevented passengers from travelling and reduced traffic substantially. Notably, total passenger numbers at London Gatwick have yet to return to the pre-pandemic levels observed in 2019. In 2023, the airport recorded total passenger numbers of 40.9m—reflecting a 12% decrease from the 46.6m passengers in 2019.<sup>9</sup>

The remainder of this report is structured as follows:

- section 2 discusses the economic footprint of London Gatwick;
- section 3 discusses the catalytic effect of London Gatwick;
- section 4 concludes;
- appendix A1 presents the total economic footprint disaggregated by LAD. Appendix A2 provides more detail on the methodology.

<sup>9</sup> Vinci (2024), '2023 Annual Results', February, p. 19.

## 2 The economic footprint of London Gatwick

### 2.1 Introduction

This section presents the economic footprint of London Gatwick in 2023. The economic footprint is a measure of the scale of the economic activity supported by the airport, measured by employment and gross value added (GVA).<sup>10</sup>

The economic footprint consists of three components, defined in Table 2.1.

Table 2.1 Components of the economic footprint

Impact	Description
Direct footprint	Employment and GVA associated with activities at the London Gatwick campus. This includes both Gatwick Airport Limited (GAL) and the other firms that operate on site (e.g. those that provide airline staff, airport management, immigration and customs staff, and retail staff).
Indirect footprint	Employment and GVA associated with the activity of firms in London Gatwick's supply chain (e.g. aircraft parts manufacturers and food and beverage suppliers).
Induced footprint	Employment and GVA associated with the spending of wages by direct and indirect employees (e.g. at restaurants and hairdressers).

Note: Employment is measured by headcount.  
Source: Oxera.

Figure 2.1 below illustrates the geographic reach of each impact relative to the study areas defined in section 1, as follows.

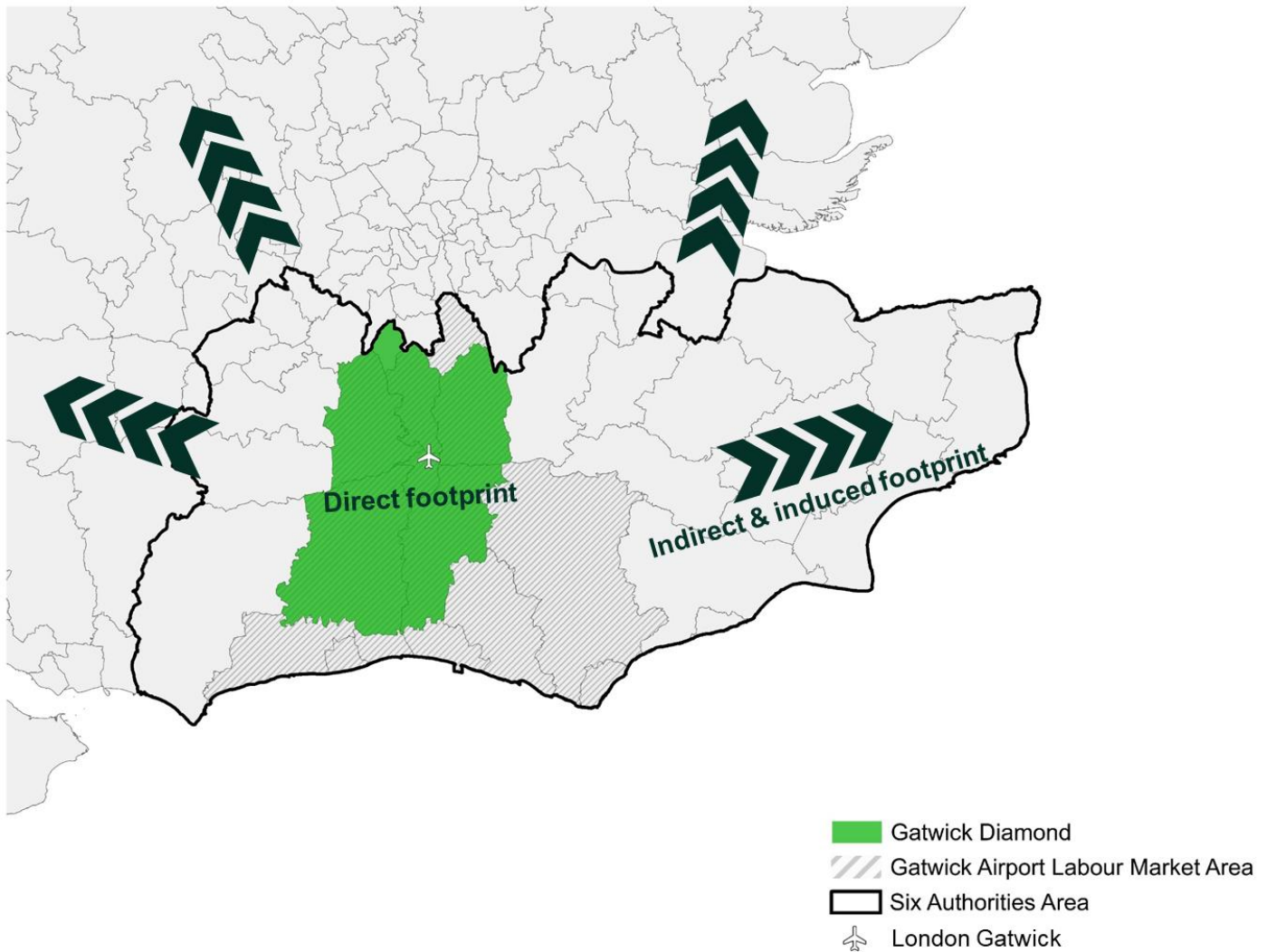
- **The direct footprint** occurs on site at the airport, since it relates to the GVA and employment that are directly associated with GAL and other firms operating at the airport.
- **The indirect and induced footprint** occurs within the local area (i.e. the Six Authorities Area) as well as across the rest of the UK.<sup>11</sup> This is because suppliers to London Gatwick may be located anywhere in the country (indirect activity) and direct and indirect employees may spend wages locally or elsewhere in the country (induced activity).

<sup>10</sup> The economic footprint is a measure of the 'gross' activity supported by the airport, not accounting for how labour and resources might be used in the absence of the airport.

<sup>11</sup> While we recognise that suppliers to the airport could be located outside of the UK, our analysis focuses on the impact of the airport within the UK.



Figure 2.1 Geography of economic footprint



Source: Oxera.

We discuss each of the footprint impacts in turn in the following subsections.

## 2.2 Direct footprint

### 2.2.1 Estimation of the direct footprint

The direct footprint is the economic activity that is directly associated with GAL and other firms operating at the airport campus. It is measured by direct employment and direct GVA as follows.

- **Direct employment** is equal to the sum of GAL employment and the employment associated with other firms operating at the airport.
- **Direct GVA** is calculated using the income approach and is equal to the sum of operating surplus, worker compensation and taxes (minus subsidies) for activities located on site at London Gatwick.<sup>12</sup>

<sup>12</sup> See Office for National Statistics (2019), 'Regional accounts methodology guide: June 2019', section 3.

The direct footprint of GAL and the other firms operating at the airport in 2023, as well as in 2021 and 2019 for comparison purposes, is presented in Table 2.2.<sup>13</sup>

As shown in Table 2.2, despite the significant effects of the COVID-19 pandemic on the aviation sector, London Gatwick has bounced back strongly in 2023, directly supporting 22,645 jobs and generating £1,675m in GVA. This represents substantial growth relative to the employment figures and GVA of 2021, which were estimated at 12,445 jobs and £598m, respectively.

While the airport has recovered from the pandemic quickly, it has not yet returned to the levels of direct employment and GVA that were observed pre-pandemic. Specifically, in 2019, London Gatwick directly supported 24,095 jobs and generated £1,835m in GVA. This is consistent with passenger numbers in 2023 still being 12% lower than in 2019.

Table 2.2 Direct footprint of London Gatwick

	2019		2021		2023	
	Employment	GVA (m)	Employment	GVA (m)	Employment	GVA (m)
GAL	3,205	£764	1,140	£59	2,465	£734
Other on-site firms	20,890	£1,071	11,305	£539	20,180	£941
<b>Total direct footprint</b>	<b>24,095</b>	<b>£1,835</b>	<b>12,445</b>	<b>£598</b>	<b>22,645</b>	<b>£1,675</b>

Note: Employment is measured by headcount and does not include furloughed employees in 2021. Employment figures are rounded to the nearest five and GVA figures are rounded to the nearest million and are presented in 2022 prices. Figures may not sum due to rounding. Figures for 2019 are estimated as part of analysis for the NRP DCO application, and have been updated to 2022 prices. Figures for 2021 were estimated as part of a previous assessment of the local economic impact of London Gatwick. Source: Oxera.

An overview of the method used to calculate the footprint of GAL and the other firms operating at the airport is provided in Table 2.3.

Table 2.3 Calculation of direct employment and GVA (2023)

	Direct employment	Direct GVA
GAL	The total employment headcount was obtained from GAL for 2023.	This was estimated as the sum of earnings before interest, taxes, depreciation and amortisation (EBITDA) and total staff costs. These figures were obtained from GAL for 2023.
Other on-site firms	This was estimated based on the number of non-GAL passholders for the airport site in 2023. <sup>1</sup>	Non-GAL staff costs were estimated based on total non-GAL staff costs. <sup>2</sup> Non-GAL GVA was estimated using the ratio of staff costs to GVA in the sectors present at the airport <sup>3</sup> obtained from the Office for National Statistics (ONS). <sup>4</sup>

<sup>13</sup> Figures for 2021 included throughout this report were estimated as part of the previous assessment of the local economic impact of London Gatwick. Details of the methodology for the 2021 figures are included in Oxera (2023), 'Local economic impact of Gatwick Airport: 2021', August. The employment estimate excludes employees who were furloughed as a result of the government's Coronavirus Job Retention (Furlough) Scheme. This scheme ended in September 2021. For further details on how the COVID-19 pandemic affected the direct footprint of London Gatwick, see Oxera (2023), 'Local economic impact of Gatwick Airport: 2021', August, p. 9.

Notes and sources: <sup>1</sup> The total number of non-GAL passholders in 2023 was adjusted to remove Embassy staff, as these individuals are assumed to be unlikely to work at the airport site on a regular basis. Furthermore, the total number of non-GAL passholders in 2023 was reduced by 4% to reflect the proportion of passes that are assumed not to be in use regularly (remained unused in the preceding six months at the time of data extraction). <sup>2</sup> Estimated based on the average salary at London Gatwick from the 2015/16 Travel to Work Survey, uplifted to 2022 prices by the increase in real UK Gross Domestic Product (GDP) per household. <sup>3</sup> The employment sectors present at the airport were sourced directly from the 2023 Travel to Work Survey: Gatwick Airport Limited (2023), 'Gatwick Employer and Travel to Work Survey'. <sup>4</sup> Office for National Statistics (2023), 'UK Input-Output Analytical Tables, industry by industry (2019 data)'.

The following subsection presents direct employment figures disaggregated to the four sub-national study areas described in section 1. Given that the direct GVA is associated with the activity on the site of London Gatwick, it is not disaggregated at a study area level.

### 2.2.2 Direct employment by study area

While all direct activity occurs on site at the airport, we can disaggregate direct employment at the study area level based on the residency of airport employees obtained from London Gatwick passholder data.<sup>14</sup> Table 2.4 summarises the direct employment supported in each study area, and Figure 2.2 presents the distribution of direct employment across the LADs in the local area. This provides an overview of the areas that benefit more significantly from the presence of London Gatwick in terms of the level of direct employment.

Table 2.4 Direct employment by study area

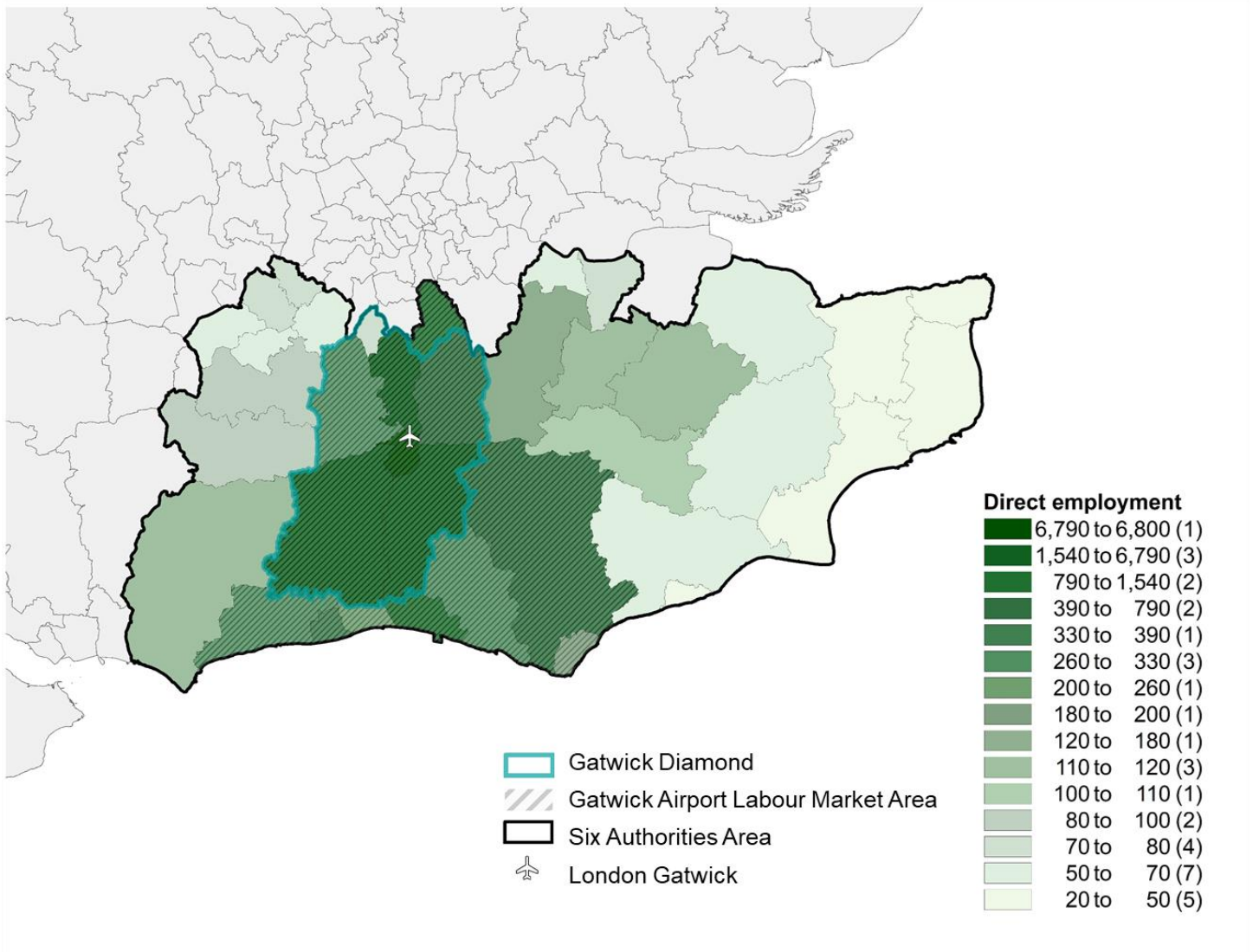
Area	2019	2021	2023
Gatwick Diamond	12,680	7,370	12,545
Gatwick Airport Labour Market Area	16,855	9,455	16,180
Six Authorities Area	18,690	10,425	17,770
Rest of UK	5,405	2,020	4,870
<b>Total</b>	<b>24,095</b>	<b>12,445</b>	<b>22,645</b>

Note: The figures in the table show an estimate of where direct employees working at the airport reside. Employment is measured by headcount and does not include furloughed employees in 2021. Estimates for each local study area include overlaps between the regions as shown in Figure 1.1 and should not be considered as additive. All figures are rounded to the nearest five and may not sum due to rounding. Figures for 2019 are estimated as part of analysis for the NRP DCO application. Figures for 2021 were estimated as part of a previous assessment of the local economic impact of London Gatwick.

Source: Oxera.

<sup>14</sup> The passholder data provided for 2023 is anonymised.

Figure 2.2 Direct employment by local authority district (2023)



Note: The map shows the total number of direct employees estimated to live in the LADs within the local area (i.e. the Six Authorities Area). As shown by the index in the bottom right-hand corner, darker shading indicates that a greater number of direct employees reside within a given LAD. The numbers in brackets indicate the number of LADs within each range.

Source: Oxera.

## 2.3 Indirect footprint

### 2.3.1 Estimation of the indirect footprint

The indirect footprint is an estimate of the employment and GVA that is supported in the UK through the supply chain of London Gatwick.

The indirect GVA was first calculated using the direct GVA of the airport and Input-Output Tables—which describe how primary inputs and products are used to produce further products and outputs for final consumption—provided by the ONS.<sup>15</sup> The indirect employment

<sup>15</sup> Office for National Statistics (2023), 'UK Input-Output Analytical Tables, industry by industry (2019 data)', 27 March.

was then estimated using the average GVA per job for the South East.<sup>16</sup>

The indirect footprint of London Gatwick in 2023, and compared to 2021 and 2019, is presented in Table 2.5, and an overview of the method used is provided in Table 2.6. A more detailed explanation of the method is set out in Appendix A2.

Table 2.5 Indirect footprint of London Gatwick

	2019		2021		2023	
	Employment	GVA (m)	Employment	GVA (m)	Employment	GVA (m)
Total indirect footprint	20,930	£1,477	7,735	£479	18,410	£1,308

Note: Employment is measured by headcount and does not include furloughed employees in 2021. Employment figures are rounded to the nearest five and GVA figures are rounded to the nearest million and are presented in 2022 prices. Figures for 2019 are estimated as part of analysis for the NRP DCO application, and updated to 2022 prices. Figures for 2021 were estimated as part of the previous assessment of the local economic impact of London Gatwick.

Source: Oxera.

Table 2.6 Calculation of indirect employment and GVA

Description	
Indirect GVA	The direct GVA (discussed in section 2.2) is first apportioned to each sector operating at the airport to give an estimate of the direct GVA associated with the different activities at the airport such as retail, catering, immigration and customs, baggage handling, and airline operations. <sup>1</sup> The direct GVA per sector is then converted to direct output using the ratio of GVA to output for each sector based on ONS UK Input-Output Tables. <sup>2</sup> The indirect output associated with the direct output of each sector is then estimated using the Input-Output model. Finally, the indirect output is converted to indirect GVA using the ratio of output to GVA for each sector.
Indirect employment	Indirect employment is estimated using the total indirect GVA (as calculated above) and the GVA per job in the South East obtained from the ONS. <sup>3</sup>

Note: <sup>1</sup> This was calculated based on the number of employees who work in different activities at the airport. This data was sourced from the GAL 2023 Employer and Travel to Work Survey. <sup>2</sup> Office for National Statistics (2023), 'UK Input-Output Analytical Tables, industry by industry (2019 data)', 27 March. <sup>3</sup> Office for National Statistics (2023), 'Sub regional productivity: labour productivity indices by UK ITL2 and ITL3 subregions', 20 June.

Source: Oxera.

### 2.3.2 Indirect footprint by study area

Unlike the direct footprint (which is contained on site at London Gatwick), the indirect footprint is spread across the local area and the UK as a whole, as suppliers to London Gatwick can be located anywhere in the country.

To calculate how much indirect activity is expected to occur in the local area and how much would occur in the rest of the UK, we use estimates for the percentage of London Gatwick's indirect GVA that is supported in different areas of the UK based on the distribution of the airport's supply chain.<sup>17</sup> We use these percentages to disaggregate the total indirect GVA and employment to each study area. Table 2.7

<sup>16</sup> Office for National Statistics (2023), 'Sub regional productivity: labour productivity indices by UK ITL2 and ITL3 subregions', 20 June.

<sup>17</sup> Oxford Economics (2017), 'The Economic impact of Gatwick Airport', p. 13.



summarises the indirect employment and GVA supported in each study area.

Table 2.7 Indirect footprint by study area

Area	2019		2021		2023	
	Employment	GVA (m)	Employment	GVA (m)	Employment	GVA (m)
Gatwick Diamond	5,015	£354	1,855	£115	4,370	£311
Gatwick Airport Labour Market Area	7,635	£539	2,835	£176	6,735	£478
Six Authorities Area	15,440	£1,090	5,510	£341	13,125	£933
Rest of UK	5,490	£387	2,225	£138	5,280	£375
<b>Total indirect footprint</b>	<b>20,930</b>	<b>£1,477</b>	<b>7,735</b>	<b>£479</b>	<b>18,410</b>	<b>£1,308</b>

Note: The figures show an estimate of the location of the indirect jobs and the indirect GVA supported by London Gatwick. Employment is measured by headcount and does not include furloughed employees in 2021. Employment figures are rounded to the nearest five and GVA figures are rounded to the nearest million and are presented in 2022 prices. Estimates for each local study area include overlaps between the regions as shown in Figure 1.1, and should not be considered additive. Figures may not sum due to rounding. Figures for 2019 are estimated as part of analysis for the NRP DCO application, and updated to 2022 prices. Figures for 2021 were estimated as part of the previous assessment of the local economic impact of London Gatwick.

Source: Oxera.

We estimate that £1,308m in GVA and 18,410 jobs were supported through the indirect footprint of London Gatwick in 2023. This implies that, for each direct job at London Gatwick, an additional 0.8 indirect jobs are supported via the airport's supply chain in 2023. In 2023, over 70% of the indirect footprint is estimated to arise within the Six Authorities Area.

The above figures demonstrate a significant improvement from 2021, when the airport's supply chain supported 7,735 jobs and contributed £479m in GVA.<sup>18</sup> This illustrates the airport's strong recovery from the COVID-19 pandemic, and its ability to generate jobs and add value through its supply chain. Indeed, in 2023 London Gatwick almost reached its pre-pandemic levels of indirect jobs and GVA. As illustrated in Table 2.7, the airport supported 20,930 jobs and contributed £1,477m in GVA before the pandemic.<sup>19</sup>

## 2.4 Induced footprint

### 2.4.1 Estimation of the induced footprint

The induced footprint is an estimate of the employment and GVA supported in the UK by the spending of wages by direct and indirect employees.

Similar to the indirect footprint, the induced footprint is estimated using Input–Output analysis. However, we amend the Input–Output model to account for compensation of employees and final consumption expenditure by households. This accounts for the extent to which an increase in GVA in one sector (e.g. transportation) would generate additional income (i.e. more wages through additional

<sup>18</sup> Figures for 2021 were estimated as part of the previous assessment of the local economic impact of London Gatwick and are presented in 2022 prices.

<sup>19</sup> Figures for 2019 are estimated as part of analysis for the NRP DCO application and are presented in 2022 prices in this report.

employment) and additional spending (i.e. more spending through the additional income generated) in other sectors.

The induced footprint of London Gatwick in 2023, as well as in 2021 and 2019, is presented in Table 2.8, and an overview of the method used to calculate the induced footprint is included in Table 2.9. A more detailed explanation is given in Appendix A2.

Table 2.8 Induced footprint of London Gatwick

	2019		2021		2023	
	Employment	GVA (m)	Employment	GVA (m)	Employment	GVA (m)
Total induced footprint	26,010	£1,835	9,615	£595	22,730	£1,615

Note: Employment is measured by headcount and does not include furloughed employees in 2021. Employment figures are rounded to the nearest five and GVA figures are rounded to the nearest million and are presented in 2022 prices. Figures for 2019 are estimated as part of analysis for the NRP DCO application and updated to 2022 prices. Figures for 2021 were estimated as part of the previous assessment of the local economic impact of London Gatwick.

Source: Oxera.

Table 2.9 Calculation of induced GVA and employment

	Description
Induced GVA	Direct GVA (discussed in section 2.2) is first apportioned to each sector operating at the airport. The direct GVA per sector is then converted to direct output using the ratio of GVA to output for each sector using ONS UK Input-Output Tables. <sup>1</sup> The induced output associated with the direct output of each sector is then estimated using a Type II Leontief Input-Output model. In addition to supply-chain effects (indirect effects), this model accounts for the effect of compensation of employees and final consumption expenditure by households (induced effects). Finally, the induced output is converted to induced GVA using the ratio of output to GVA for each sector.
Induced employment	Estimated using the total induced GVA (as calculated above) and the GVA per job for the South East obtained from the ONS. <sup>2</sup>

Note: <sup>1</sup> Office for National Statistics (2023), 'UK Input-Output Analytical Tables, industry by industry (2019 data)', 27 March. <sup>2</sup> Office for National Statistics (2023), 'Sub regional productivity: labour productivity indices by UK ITL2 and ITL3 subregions', 20 June.

Source: Oxera.

#### 2.4.2 Induced footprint by study area

As mentioned above, the induced footprint is spread across the UK, as direct and indirect employees may spend their wages anywhere in the UK.<sup>20</sup>

To calculate how much induced activity is expected to be supported in the local area and how much would be supported in the rest of the UK, we first estimate a regional input-output table for the South East area of the UK.<sup>21</sup> Based on this, we estimate the induced footprint of the airport in the South East.

<sup>20</sup> While direct and indirect employees could spend their wages outside of the UK, our analysis captures the induced activity in the UK alone.

<sup>21</sup> We do this using location quotients, which reflect the proportion of regional input requirements that are met by firms located within the region estimated using ONS data on GVA per product by region. For further details on location quotients, see Flegg, A.T. and Webber, C.D. (2000), 'Regional Size, Regional Specialization and the FLQ Formula', *Regional Studies*, **34**:6, pp. 563–569.

We then derive the induced footprint that is expected to be supported in the local area (i.e. the Six Authorities Area) by adjusting the induced GVA supported in the South East by the share of total household consumption in the Six Authorities Area relative to total household consumption in the South East.<sup>22</sup> Finally, we disaggregate the induced GVA and employment in the Six Authorities Area to the Gatwick Diamond and the Gatwick Airport Labour Market Area using the proportion of direct employees living in each study area.<sup>23</sup>

Table 2.10 summarises the induced employment and GVA that are supported in each study area.

Table 2.10 Induced footprint by study area

Area	2019		2021		2023	
	Employment	GVA (m)	Employment	GVA (m)	Employment	GVA (m)
Gatwick Diamond	6,550	£462	2,425	£150	5,660	£402
Gatwick Airport Labour Market Area	8,705	£614	3,110	£193	7,305	£519
Six Authorities Area	9,655	£681	3,430	£212	8,020	£570
Rest of UK	16,355	£1,154	6,185	£383	14,705	£1,045
<b>Total induced footprint</b>	<b>26,010</b>	<b>£1,835</b>	<b>9,615</b>	<b>£595</b>	<b>22,730</b>	<b>£1,615</b>

Note: The figures show an estimate of the location of the induced jobs and the induced GVA supported by London Gatwick. Employment is measured by headcount and does not include furloughed employees in 2021. Employment figures are rounded to the nearest five and GVA figures are rounded to the nearest million and are presented in 2022 prices. Estimates for each local study area include overlaps between the regions as shown in Figure 1.1 and should not be considered additive. The majority (c. 70%) of the induced footprint estimated as 'rest of UK' occurs within the South East region. Figures may not sum due to rounding. Figures for 2019 are estimated as part of analysis for the NRP DCO application and updated to 2022 prices. Figures for 2021 were estimated as part of the previous assessment of the local economic impact of London Gatwick.

Source: Oxera analysis.

We estimate that £1,615m in GVA and 22,730 jobs were supported through the induced footprint of London Gatwick in 2023. This implies that, for each direct job at London Gatwick and indirect job supported through the airport's supply chain, a further 0.6 jobs are supported through induced spending. Approximately 35% of these benefits are estimated to arise within the Six Authorities Area.

The estimates demonstrate a significant increase in induced spending from 2021, where spending through the wages of direct and indirect employees supported 9,615 jobs and contributed £595m in GVA.<sup>24</sup> This increase in induced spending is likely to reflect the increased ability of workers in the study area to spend their wages, as a result of fewer

<sup>22</sup> Office for National Statistics (2020), 'National Household Final Consumption Expenditure by COICOP commodities, 2009 to 2018', July.

<sup>23</sup> This information is obtained from the 2023 passholder data which is provided by GAL and is anonymised. We use this data based on the assumption that greater induced GVA will be supported in areas where a greater number of direct employees are living.

<sup>24</sup> 2021 GVA estimates are presented in 2022 prices. 2021 figures are estimated as part of the previous assessment of the local economic impact of London Gatwick. For further details, see Oxera (2023), 'Local economic impact of Gatwick Airport: 2021', August.



lockdowns and restrictions due to the COVID-19 pandemic, and an increase in the overall level of economic activity.<sup>25</sup>

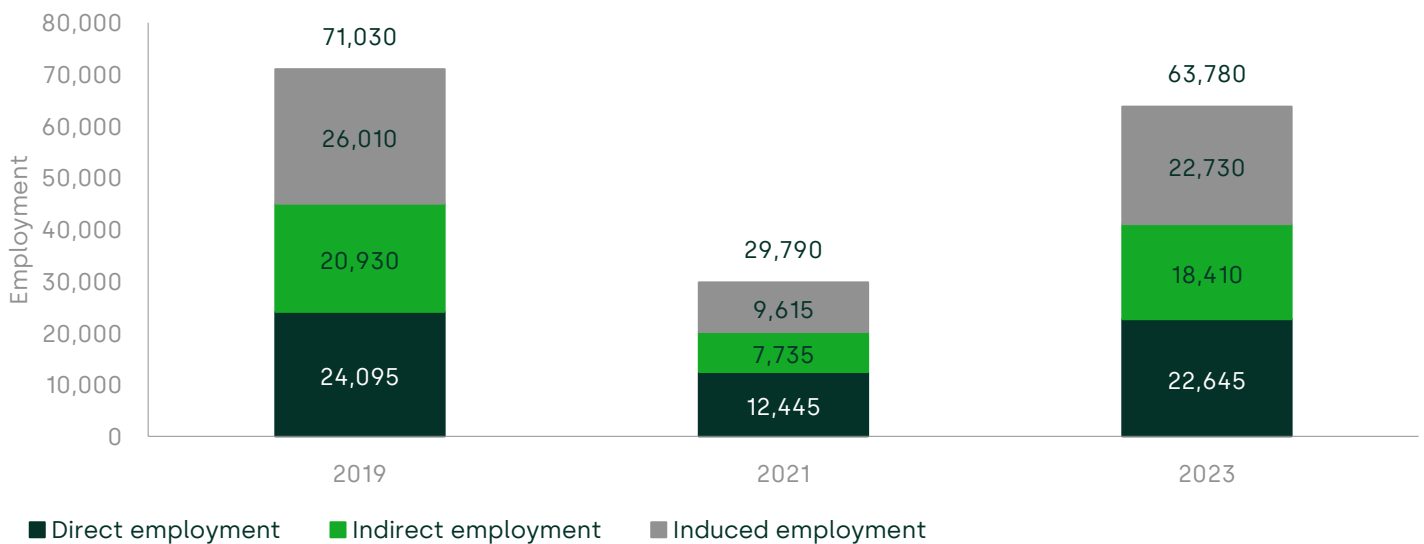
Nevertheless, a comparison of the above figures with those estimated before the pandemic shows that induced jobs and spending have yet to reach the levels observed in 2019. In that year, it is estimated that the induced footprint of London Gatwick supported £1,835m in GVA and 26,010 jobs.

## 2.5 Total economic footprint

The estimates for the direct, indirect and induced footprints together show that London Gatwick generated £4.6bn in GVA and supported 63,780 jobs in the UK in 2023.

Figure 2.3 and Figure 2.4 present the total economic footprint of London Gatwick in 2023, and compare this with 2021 and 2019 in terms of employment and GVA.

Figure 2.3 Total employment footprint of London Gatwick (2019, 2021, 2023)

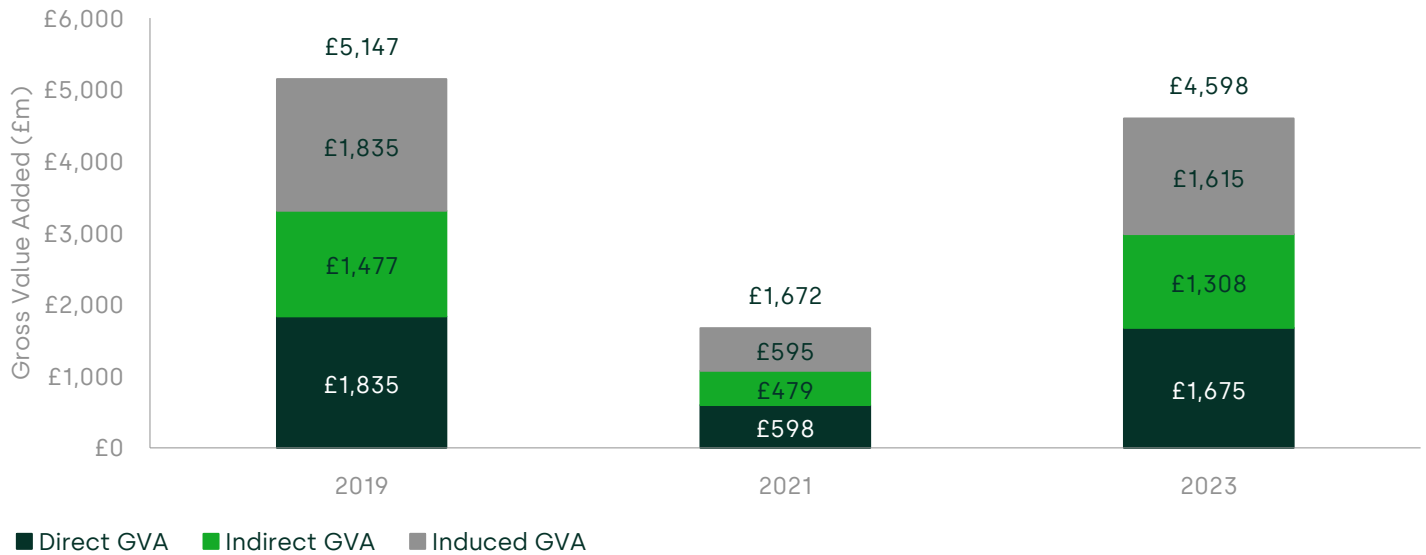


Note: Employment is measured by headcount and does not include furloughed employees in 2021. Employment figures are rounded to the nearest five. Figures may not sum due to rounding. Figures for 2019 are estimated as part of analysis for the NRP DCO application. Figures for 2021 were estimated as part of the previous assessment of the local economic impact of London Gatwick.

Source: Oxera.

<sup>25</sup> In 2021, our assessment indicated that, for each direct job at London Gatwick and indirect job supported through the airport's supply chain, an additional 0.5 induced jobs were generated. Oxera (2023), 'Local economic impact of Gatwick Airport: 2021', August, p. 19.

Figure 2.4 Total GVA footprint of London Gatwick (2019, 2021, 2023)



Note: GVA figures are rounded to the nearest million and are presented in 2022 prices. Figures may not sum due to rounding. Figures for 2019 are estimated as part of analysis for the NRP DCO application and updated to 2022 prices. Figures for 2021 were estimated as part of the previous assessment of the local economic impact of London Gatwick.  
Source: Oxera.

Of the airport's total footprint presented above, approximately 70% of the impact arose in the local area (i.e. the Six Authorities Area). Table 2.11 presents the total economic footprint of London Gatwick in 2023, and compares this with the estimates for 2021 and 2019 in each study area. This provides an estimate of the total scale of the economic activity supported by the airport in the local area and beyond.

Table 2.11 Total economic footprint of London Gatwick by study area

Area	2019		2021		2023	
	Employment	GVA (m)	Employment	GVA (m)	Employment	GVA (m)
Gatwick Diamond	35,660	£2,651	16,725	£862	32,675	£2,388
Gatwick Airport Labour Market Area	40,435	£2,988	18,390	£966	36,680	£2,673
Six Authorities Area	49,190	£3,605	21,385	£1,151	43,795	£3,178
Rest of UK	21,840	£1,541	8,405	£521	19,985	£1,420
<b>Total economic footprint</b>	<b>71,030</b>	<b>£5,147</b>	<b>29,790</b>	<b>£1,672</b>	<b>63,780</b>	<b>£4,598</b>

Note: The figures show an estimate of the location of the jobs and the associated GVA supported by London Gatwick. Employment is measured by headcount and does not include furloughed employees in 2021. Employment figures are rounded to the nearest five and GVA figures are rounded to the nearest million and are presented in 2022 prices. Estimates for each local study area include overlaps between the regions as shown in Figure 1.1, and should not be considered additive. Figures may not sum due to rounding. Figures for 2019 are estimated as part of analysis for the NRP DCO application and updated to 2022 prices. Figures for 2021 were estimated as part of the previous assessment of the local economic impact of London Gatwick.  
Source: Oxera.

### 3 The catalytic effect of London Gatwick

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The catalytic effect refers to the economic activity of firms that choose to locate near the airport because of the connectivity that it offers. The activity of these firms is not directly related to the airport's activities—i.e. it is not directly related to the direct, indirect or induced footprint—but the firms nevertheless benefit from the additional connectivity that the airport provides. For this reason, catalytic effects are concentrated locally. For the purpose of this assessment, it is assumed that the geographic scope of catalytic impacts is the Six Authorities Area, although some of the catalytic impact of the airport could occur outside of this area.<sup>26</sup>

The catalytic effect is calculated as a residual of other impacts—i.e. the remaining employment impact in the study area that does not correspond to the direct, indirect or induced impacts. It is estimated in three steps:

- calculate the total net impact of the airport in the Six Authorities Area;
- identify the combined direct, indirect and induced impact that is attributable to the Six Authorities Area;
- calculate the difference between the total net impact and the direct, indirect and induced impacts.

We discuss the estimation of the total net economic impact and the catalytic effect in more detail in sections 3.1 and 3.2 respectively.

#### 3.1 Total net economic impact of London Gatwick

While the economic footprint analysis in section 2 shows the scale of the economic activity associated with London Gatwick, it does not take account of the alternative uses of resources and people if the airport did not exist (i.e. it is a gross impact). Therefore, the total net impact of the airport would include net direct, indirect, induced and other impacts once alternative uses of resources and people absent the airport are accounted for and removed from the gross (footprint) impacts at the local level.

To estimate the total net impact of the airport's activities in the Six Authorities Area, an elasticity of local employment to air traffic (0.13%) is used. This employment elasticity is derived from an econometric analysis of the relationship between local employment and air passenger traffic in the UK.<sup>27</sup> This elasticity is applied to the passenger traffic to obtain the corresponding percentage increase in

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<sup>26</sup> Catalytic impacts outside of the Six Authorities Area are not within the scope of the local impact assessment and have therefore not been assessed.

<sup>27</sup> The analysis in Percoco, M. (2010), 'Airport Activity and Local Development: Evidence from Italy', *Urban Studies*, 47:11, September, pp. 2427–2443; and Brueckner, J.K. (2003), 'Airline Traffic and Urban Economic Development', *Urban Studies*, 40:8, July, pp. 1455–1469 is replicated to produce elasticity estimates using 2018 data. The approach takes the form of a two-stage regression analysis with a non-linear first stage, and makes use of the variation between locations in the UK (cross-sectional analysis) to assess the impact of increased air traffic on local employment levels. The results suggest that a 1% increase in traffic levels increases local employment levels around Gatwick on average by 0.13%, given the labour market conditions and air traffic levels in the UK in 2018.

local employment as a result of the airport. This percentage increase in local employment is then multiplied by the total local employment in the Six Authorities Area to obtain an estimate of the total net employment impact of the airport in the Six Authorities Area.<sup>28</sup>

This net employment impact measures the change in local employment that occurs as a result of the existence of London Gatwick. This accounts for the increase in local employment driven by either a decrease in local unemployment and inactivity, or an inflow of workers into the area (e.g. workers migrating or commuting into the area for work).

### 3.2 Catalytic effect

As mentioned above, the catalytic effect refers to the economic activity of firms that choose to locate near the airport because of the connectivity that it offers. It is calculated as the difference between the total net impact and the direct, indirect and induced impacts. In other words, the catalytic effect is calculated as a residual of other impacts—i.e. the remaining employment impact in the study area that does not correspond to the direct, indirect or induced impacts.

The net impact estimates provide a robust approach to identifying local impacts, as the elasticity used to produce these estimates is specific to the local area. If one assumes that the net impact of the airport at the Six Authorities Area level is equal to the combined net direct, indirect, induced and catalytic impacts at this geographic scale, it follows that the net catalytic impact would correspond to the difference between the net total impact and net direct, indirect and induced impacts.

However, estimating net direct, indirect and induced impacts requires assumptions on displacement that are difficult to determine robustly due to a lack of evidence and information. Gross impacts are therefore used to derive local catalytic effects. This approach is conservative because the catalytic footprint is likely to be higher if the gross total footprint at the local level (i.e. the economic impact of the airport without accounting for alternative uses of resources and people) is used to estimate the catalytic impact.

From the catalytic employment effect, the catalytic GVA is estimated by using the average GVA per job in the South East,<sup>29</sup> since all catalytic employment is generated within the Six Authorities study area.

Table 3.1 below presents the catalytic effect for 2023, and compares this with 2021 and 2019.

We estimate that £908m in GVA and 12,780 jobs were supported in the local area through the catalytic effect of London Gatwick in 2023. As with the indirect and induced footprint of London Gatwick, the

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<sup>28</sup> In the absence of the full calendar year local employment figure for 2023, we used the latest available figure (October 2022 to September 2023) from Office for National Statistics (2024), 'LI01 Regional labour market: local indicators for counties, local and unitary authorities', January.

<sup>29</sup> Office for National Statistics (2023), 'Sub regional productivity: labour productivity indices by UK ITL2 and ITL3 subregions', 20 June.

catalytic effect in 2023 is close to pre-pandemic levels, estimated at 14,315 jobs and £1,010m in GVA, respectively.

Table 3.1 Catalytic effect of London Gatwick

	2019		2021		2023	
	Employment	GVA (m)	Employment	GVA (m)	Employment	GVA (m)
Total catalytic effect	14,315	£1,010	13,400	£830	12,780	£908

Note: Employment figures are rounded to the nearest five and GVA figures are rounded to the nearest million and are presented in 2022 prices. Figures for 2021 were estimated as part of the previous assessment of the local economic impact of London Gatwick. As highlighted in the 2021 assessment, the usual relationship between activity at London Gatwick and catalytic employment is unlikely to hold for 2021 due to the impact of the COVID-19 pandemic and the significant changes occurring in employment and economic activity.

Source: Oxera.

As previously discussed, the resulting catalytic effect is a conservative estimate as it is derived from a net impact total. Net impacts take account of the alternative uses of resources and people absent the airport. To the extent that a share of the economic footprint of the airport would still occur in the local area absent the airport, this share of the footprint is not net additional to the local economy and is excluded from the net impacts of the airport.

### 3.1.2 Catalytic effect by study area

Catalytic estimates at the level of the Six Authorities Area are disaggregated further into estimates for other study areas (Labour Market Area and Gatwick Diamond) using the 2019 Civil Aviation Authority (CAA) passenger survey data to determine the local authorities from which passengers originate and depart when travelling through London Gatwick.<sup>30</sup>

As catalytic effects reflect the economic activity of firms that choose to be located near the airport because of the connectivity that it offers, such economic activity would be reflected in individuals travelling from the airport to their place of work, a company locating close to the airport because of the connectivity that it offers, or the economic activity generated by tourists travelling from/to the airport and their spending in the local economy. The CAA data would therefore capture the distribution of the economic activity around the airport due to its connectivity.

Table 3.2 summarises the catalytic effect in terms of the employment and GVA supported in each study area.

Table 3.2 Catalytic effect by study area

Area	2019		2021		2023	
	Employment	GVA (m)	Employment	GVA (m)	Employment	GVA (m)
Gatwick Diamond	3,420	£241	3,200	£198	3,050	£217
Gatwick Airport Labour Market Area	8,265	£583	7,735	£479	7,170	£509
Six Authorities Area	14,315	£1,010	13,400	£830	12,780	£908
<b>Total catalytic effect</b>	<b>14,315</b>	<b>£1,010</b>	<b>13,400</b>	<b>£830m</b>	<b>12,780</b>	<b>£908</b>

<sup>30</sup> Civil Aviation Authority (2019), 'Passenger survey report 2019', data provided by GAL.

Note: The figures show an estimate of the location of the catalytic jobs and the catalytic GVA supported by London Gatwick. Employment figures are rounded to the nearest five and GVA figures are rounded to the nearest million and are presented in 2022 prices. Estimates for each local study area include overlaps between the regions as shown in Figure 1.1 and should not be considered additive. No results are presented for 'Rest of UK', as the catalytic effect occurs only within the Six Authorities Area because the catalytic effect relates to the local business opportunities provided based on proximity to the airport. Figures may not sum due to rounding.  
Source: Oxera.

## 4 Conclusion

Despite the challenges faced by the aviation industry and the broader UK economy during the COVID-19 pandemic, London Gatwick is continuing to have a positive impact on the economy of the local area and the wider UK economy. Our economic footprint assessments for 2023 illustrate a significant increase in job creation and spending associated with the airport relative to 2021. Importantly, the airport has also almost reached the economic footprint levels observed prior to the pandemic.

The impact of London Gatwick on the local economy includes direct activity on site associated with servicing passenger traffic, indirect activity across the airport's supply chain, induced activity through spending of wages by direct and indirect employees, and the catalytic effect from businesses relocating or expanding in the local area due to the connectivity that the airport provides.

We estimate that London Gatwick generated £5.5bn in GVA and supported 76,560 jobs in the UK in 2023. Approximately 74% of this impact arose in the local area (i.e. the Six Authorities Area), equivalent to 56,575 jobs and £4.1bn in GVA supported in the local area. Table 4.1 presents the total economic impact of London Gatwick in 2023, and compares this with the estimates for 2021 and 2019 in each study area. Figure 4.1 and Figure 4.2 present the geographical distribution of the GVA and employment supported by London Gatwick in 2023, by type of impact.

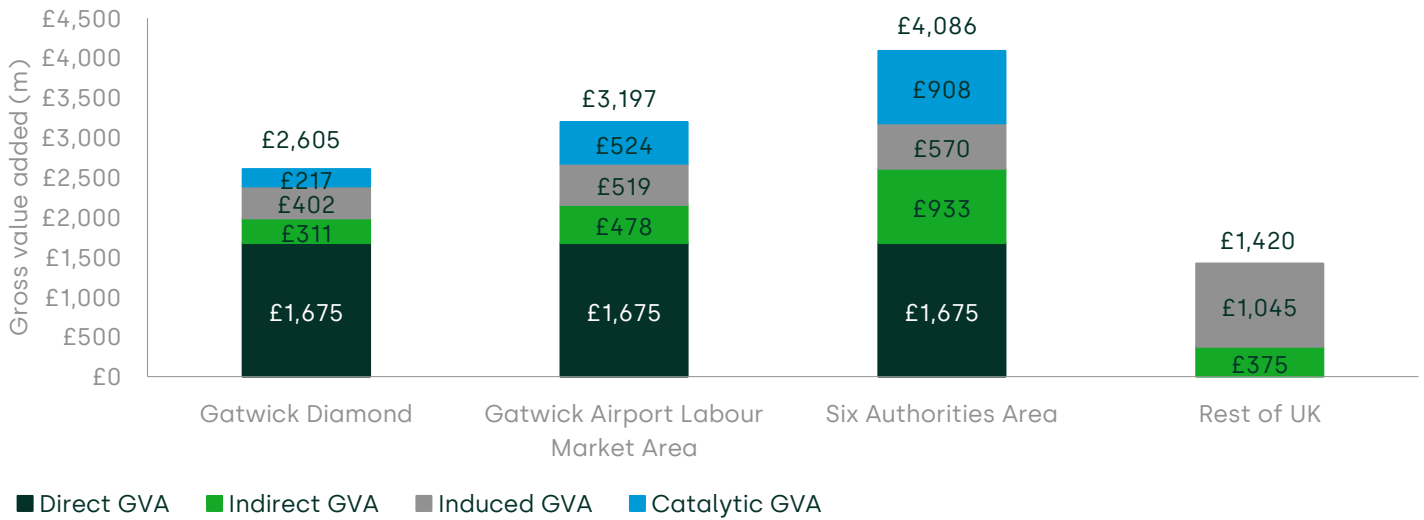
Table 4.1 Total economic impact of London Gatwick by study area

Area	2019		2021		2023	
	Employment	GVA (m)	Employment	GVA (m)	Employment	GVA (m)
<b>Total economic impact</b>	<b>85,350</b>	<b>£6,157</b>	<b>43,195</b>	<b>£2,501</b>	<b>76,560</b>	<b>£5,506</b>
Gatwick Diamond	39,080	£2,892	19,925	£1,061	35,725	£2,605
Gatwick Airport Labour Market Area	48,700	£3,571	26,125	£1,445	44,065	£3,197
Six Authorities Area	63,505	£4,616	34,785	£1,981	56,570	£4,086
Rest of UK	21,840	£1,541	8,410	£521	19,985	£1,420

Note: The figures show an estimate of the location of the jobs and the GVA supported by London Gatwick. Employment is measured by headcount and does not include furloughed employees in 2021. Employment figures are rounded to the nearest five and GVA figures are rounded to the nearest million and are presented in 2022 prices. Estimates for each local study area include overlaps between the regions as shown in Figure 1.1, and should not be considered additive. Figures may not sum due to rounding. Figures for 2019 are estimated as part of analysis for the NRP DCO application and updated to 2022 prices. Figures for 2021 were estimated as part of the previous assessment of the local economic impact of London Gatwick.

Source: Oxera.

Figure 4.1 GVA impact of London Gatwick by study area (2023)



Note: The figures show an estimate of the location of the GVA supported by London Gatwick. All direct impacts occur on site at the airport, i.e. within the Gatwick Diamond. As the Gatwick Airport Labour Market Area and the Six Authorities Area both encompass London Gatwick (see Figure 1.1), the direct footprint is the same in each local study area and there is no direct footprint outside of the Six Authorities Area. There is no catalytic effect outside of the Six Authorities Area, as the catalytic effect relates to the local business opportunities provided by proximity to the airport. Estimates for each local study area include overlaps between the regions as shown in Figure 1.1, and should not be considered additive. GVA figures are rounded to the nearest million and are presented in 2022 prices. Figures may not sum due to rounding. Source: Oxera.

Figure 4.2 Employment impact of London Gatwick by study area (2023)



Note: The figures show an estimate of the location of the jobs supported by London Gatwick. All direct impacts occur on site at the airport, i.e. within the Gatwick Diamond. As the Gatwick Airport Labour Market Area and the Six Authorities Area both encompass London Gatwick (see Figure 1.1), the direct footprint is the same in each local study area and there is no direct footprint outside of the Six Authorities Area. There is no catalytic effect outside of the Six Authorities Area, as the catalytic effect relates to the local business opportunities provided by proximity to the airport. Estimates for each local study area include overlaps between the regions as shown in Figure 1.1, and should not be considered additive. Employment is measured by headcount. Employment figures are rounded to the nearest five and may not sum due to rounding. Source: Oxera.



## A1 Appendix 1—economic footprint of London Gatwick by local authority district

In this appendix, we present the economic impact of London Gatwick disaggregated by LAD in the local area (i.e. the Six Authorities Area). The employment figures presented in this appendix are a measure of headcount. GVA figures are presented in 2022 prices.

### A1.1 Direct footprint

While all direct activity occurs on site at the airport, we estimate the number of direct employees living in each LAD in the local area and in the rest of the UK based on the residency of London Gatwick employees.<sup>31</sup> Given that direct GVA that occurs on site at the airport is the sum of operating surplus, worker compensation and taxes, there is not a straightforward approach to estimate direct GVA by LAD. In the tables below, we provide an indicative estimate of GVA by LAD in 2023, proportionate to the number of employees living in each LAD.

Table A1.1 Direct footprint by local authority in 2023

LAD	Employment	GVA (£m)
Adur	205	15.2
Arun	283	20.9
Ashford	55	4.0
Brighton and Hove	795	58.8
Canterbury	31	2.3
Chichester	112	8.3
Crawley	6,796	502.8
Croydon	1,266	93.7
Dartford	59	4.4
Dover	23	1.7
Eastbourne	180	13.4
Elmbridge	64	4.7
Epsom and Ewell	78	5.8
Folkestone and Hythe	24	1.7
Gravesham	73	5.4
Guildford	81	6.0
Hastings	34	2.5
Horsham	1,691	125.1
Lewes	263	19.5
Maidstone	118	8.7
Mid Sussex	1,545	114.3
Mole Valley	285	21.1
Reigate and Banstead	1,752	129.6
Rother	61	4.5
Runnymede	71	5.2
Sevenoaks	121	9.0
Spelthorne	79	5.8
Surrey Heath	60	4.5

<sup>31</sup> The residency of London Gatwick employees is obtained from passholder data for 2023. The passholder data is obtained from GAL and is anonymised.

LAD	Employment	GVA (£m)
Swale	63	4.7
Tandridge	397	29.4
Thanet	24	1.8
Tonbridge and Malling	110	8.1
Tunbridge Wells	109	8.1
Waverley	87	6.5
Wealden	391	28.9
Woking	55	4.1
Worthing	331	24.5
Rest of UK	4,872	360.5

Note: The figures in the table show an estimate of where direct employees working at the airport live. Employment is measured by headcount. GVA figures are presented in 2022 prices.

Source: Oxera.

## A1.2 Indirect footprint

The indirect footprint is spread across the UK, as suppliers to London Gatwick can be located in the local area or elsewhere in the country. To estimate the indirect footprint by LAD, we disaggregate the indirect footprint supported in the Six Authorities Area (as discussed in section 2.3) by the proportion of total UK GVA generated in each LAD in the local area.<sup>32</sup>

As such, the tables below show estimates of the location of the indirect jobs and the indirect GVA supported in the LADs in the local area and in the rest of the UK.

Table A1.2 Indirect footprint by local authority in 2023

LAD	Employment	GVA (£m)
Adur	109	7.8
Arun	223	15.9
Ashford	245	17.4
Brighton and Hove	669	47.5
Canterbury	174	12.3
Chichester	236	16.8
Crawley	1,475	104.8
Croydon	843	59.9
Dartford	370	26.3
Dover	280	19.9
Eastbourne	97	6.9
Elmbridge	546	38.8
Epsom and Ewell	186	13.2
Folkestone and Hythe	184	13.1
Gravesham	161	11.4
Guildford	411	29.2
Hastings	89	6.3
Horsham	496	35.2
Lewes	137	9.7

<sup>32</sup> Office for National Statistics (2023), 'Regional gross value added (balanced) by industry: local authorities by ITL1 region', 25 April.

LAD	Employment	GVA (£m)
Maidstone	318	22.6
Mid Sussex	502	35.7
Mole Valley	597	42.4
Reigate and Banstead	881	62.6
Rother	76	5.4
Runnymede	520	36.9
Sevenoaks	317	22.5
Spelthorne	392	27.9
Surrey Heath	314	22.3
Swale	326	23.2
Tandridge	234	16.6
Thanet	122	8.7
Tonbridge and Malling	478	34.0
Tunbridge Wells	243	17.3
Waverley	189	13.4
Wealden	166	11.8
Woking	218	15.5
Worthing	304	21.6
Rest of UK	5,281	375.2

Note: The figures in the table show an estimate of the location of the indirect jobs and the indirect GVA. Employment is measured by headcount. GVA figures are presented in 2022 prices.

Source: Oxera.

### A1.3 Induced footprint

The induced footprint is spread across the UK, as direct and indirect employees may spend their wages in the local area or elsewhere in the country. To estimate the induced footprint by LAD, we disaggregate the induced footprint in the Six Authorities Area (as discussed in section 2.4.2) to each LAD based on the residency of direct employees from passholder data shared by GAL. This is based on the assumption that airport employees (and indirect employees in the airport's supply chain)<sup>33</sup> are more likely to spend their wages close to their place of residence than elsewhere.

As such, the table below shows an estimate of the location of the induced jobs and the induced GVA supported in the LADs in the local area and in the rest of the UK.

Table A1.3 Induced footprint by local authority in 2023

LAD	Employment	GVA (£m)
Adur	92	6.6
Arun	128	9.1
Ashford	25	1.7
Brighton and Hove	359	25.5
Canterbury	14	1.0

<sup>33</sup> We assume that employees in the airport's supply chain would be distributed throughout the local area in a similar way to airport employees. This assumption reflects the localised nature of the airport's supply chain, as shown by the indirect footprint results (i.e. localities closest to the airport represent a larger share of the airport's supply chain).

LAD	Employment	GVA (£m)
Chichester	50	3.6
Crawley	3,068	218.0
Croydon	571	40.6
Dartford	27	1.9
Dover	10	0.7
Eastbourne	81	5.8
Elmbridge	29	2.1
Epsom and Ewell	35	2.5
Folkestone and Hythe	11	0.8
Gravesham	33	2.4
Guildford	36	2.6
Hastings	15	1.1
Horsham	763	54.2
Lewes	119	8.4
Maidstone	53	3.8
Mid Sussex	697	49.5
Mole Valley	129	9.1
Reigate and Banstead	791	56.2
Rother	28	2.0
Runnymede	32	2.3
Sevenoaks	55	3.9
Spelthorne	36	2.5
Surrey Heath	27	1.9
Swale	28	2.0
Tandridge	179	12.7
Thanet	11	0.8
Tonbridge and Malling	50	3.5
Tunbridge Wells	49	3.5
Waverley	39	2.8
Wealden	177	12.5
Woking	25	1.8
Worthing	149	10.6
Rest of UK	14,706	1,044.9

Note: The figures in the table show an estimate of the location of the induced jobs and the induced GVA. Employment is measured by headcount. GVA figures are presented in 2022 real prices. The majority (c. 70%) of the induced footprint estimated as 'rest of UK' occurs within the South East region.

Source: Oxera.

#### A1.4 Catalytic effect

The catalytic effect of the airport is located within the local area (i.e. the Six Authorities Area), since catalytic impacts are related to the local business opportunities provided by proximity to the airport. To calculate the catalytic effect by LAD, we use the percentage of passengers departing from London Gatwick originating from each LAD.<sup>34</sup>

As such, the table below provides an estimate of the location of the catalytic jobs and the catalytic GVA supported in the LADs in the local

<sup>34</sup> Based on 2019 CAA passenger survey data obtained from GAL.

area. As discussed in section 3, the catalytic effect is not a gross footprint measure.

Table A1.4 Catalytic effect by local authority in 2023

LAD	Employment	GVA (£m)
Adur	163	11.6
Arun	355	25.2
Ashford	177	12.6
Brighton and Hove	1,609	114.3
Canterbury	332	23.6
Chichester	326	23.1
Crawley	492	34.9
Croydon	1,000	71.0
Dartford	171	12.1
Dover	160	11.3
Eastbourne	311	22.1
Elmbridge	319	22.7
Epsom and Ewell	226	16.1
Folkestone and Hythe	177	12.6
Gravesham	160	11.3
Guildford	433	30.8
Hastings	164	11.7
Horsham	596	42.3
Lewes	352	25.0
Maidstone	347	24.6
Mid Sussex	546	38.8
Mole Valley	300	21.3
Reigate and Banstead	576	41.0
Rother	223	15.9
Runnymede	153	10.9
Sevenoaks	326	23.1
Spelthorne	98	6.9
Surrey Heath	194	13.8
Swale	218	15.5
Tandridge	316	22.4
Thanet	187	13.3
Tonbridge and Malling	249	17.7
Tunbridge Wells	322	22.9
Waverley	252	17.9
Wealden	451	32.0
Woking	186	13.2
Worthing	314	22.3

Note: The figures in the table show an estimate of the location of the catalytic jobs and the associated GVA. Employment is measured by headcount and does not include furloughed employees. GVA figures are presented in 2022 prices.

Source: Oxera.

The tables in this appendix provide a detailed overview of the methods used to calculate the indirect and induced footprint GVA.

Table A2.1 Calculation of indirect GVA

Component	Input	Description
Share of direct GVA by sector ( $E = C / D$ )	Direct employees by sector on site (A)	The total number of direct employees working in each occupation at the airport (e.g. airline pilots, cabin crew, retail services, customs, immigration) in 2023 is calculated based on data from the GAL 2023 Employer and Travel to Work Survey. Each occupation is then matched to an ONS SIC Code <sup>1</sup> (e.g. Transportation and Storage, Accommodation and Food Service Activities, Administrative and Support Service Activities) and the number of direct employees working in each sector is calculated.
	Average GVA per employee by sector (B)	The average GVA per employee in each sector is calculated using the average labour compensation for that sector from the 2019 Annual Business Survey <sup>2</sup> and the ratio of labour compensation to GVA based on ONS data. <sup>3</sup>
	Implied direct GVA per sector (C = A x B)	The GVA per sector is calculated based on the total number of direct employees per sector (A) and the average GVA per employee by sector (B).
	Total implied direct GVA (D)	The implied direct GVA for each sector (C) is summed to give the total implied direct GVA.
Actual direct GVA by sector ( $G = E \times F$ )	Share of direct GVA by sector (E)	As calculated above.
	Direct GVA (F)	See direct footprint analysis described in section 2.2.
Direct output by sector ( $I = G \times H$ )	Direct GVA by sector (G)	As calculated above.
	Output to GVA ratio by sector (H)	The ratio of GVA per final unit of output is calculated using ONS UK Input-Output Tables. <sup>3</sup>
Indirect (supply-chain) output by product ( $L = I \times J \times K$ )	Direct output by sector (I)	As calculated above.
	Share of output per product by sector (J)	The share of output for each product in each sector is calculated using ONS UK Input-Output Tables <sup>3</sup> as the sum of total output for the product divided by the total output of the associated sector.
	Indirect (supply-chain) spending multiplier by unit of final output (K)	The output multiplier for supply-chain spending for a unit of final output by product is calculated using ONS UK Input-Output Tables (Type I Leontief). <sup>3</sup>
Indirect (supply-chain) GVA ( $N = L / M$ summed across products)	Indirect (supply-chain) output by product (L)	As calculated above.
	Output to GVA ratio by product (M)	The ratio of GVA per final unit of output is calculated using ONS UK Input-Output Tables. <sup>3</sup>

Note: <sup>1</sup> Office for National Statistics (2022), 'UK SIC 2007', 24 January. <sup>2</sup> Office for National Statistics (2021), 'Non-financial business economy, UK and regional (Annual Business Survey): 2019 results', 24 June. <sup>3</sup> Office for National Statistics (2023), 'UK Input-Output Analytical Tables, industry by industry (2019 data)'.  
Source: Oxera.

Table A2.2 Calculation of induced GVA

Component	Input	Description
Share of direct GVA by sector ( $E = C / D$ )	Direct employees by sector on site (A)	Same calculation steps as described in Table A2.1.
	Average GVA per employee by sector (B)	Same calculation steps as described in Table A2.1.
	Implied direct GVA per sector ( $C = A \times B$ )	Same calculation steps as described in Table A2.1.
	Total implied direct GVA (D)	Same calculation steps as described in Table A2.1.
Actual direct GVA by sector ( $G = E \times F$ )	Share of direct GVA by sector (E)	Same calculation steps as described in Table A2.1.
	Direct GVA (F)	See direct footprint analysis described in section 2.2.
Direct output by sector ( $I = G \times H$ )	Direct GVA by sector (G)	Same calculation steps as described in Table A2.1.
	Output to GVA ratio by sector (H)	Same calculation steps as described in Table A2.1.
Indirect (supply-chain) and induced output by product ( $L = I \times J \times K$ )	Direct output by sector on site (I)	Same calculation steps as described in Table A2.1.
	Share of product output by sector (J)	Same calculation steps as described in Table A2.1.
	Indirect (supply-chain) and induced spending multiplier by unit of final output (K)	The indirect and induced spending multiplier per unit of final output is calculated using ONS UK Input-Output Tables (derived Type II Leontief) <sup>1</sup> that include the compensation of employees.
Indirect (supply-chain) and induced GVA ( $N = L / M$ summed across products)	Indirect (supply-chain) and induced output by product (L)	As calculated above.
	Output/GVA ratio by product (M)	Same calculation steps as described in Table A2.1.
Induced GVA ( $P = N - O$ )	Indirect (supply-chain) and induced GVA footprint (N)	As calculated above.
	Indirect GVA footprint (O)	Same calculation steps as described in Table A2.1.

Note: <sup>1</sup> The Type II Leontief matrix is not provided directly by the ONS. Oxera has derived it using the UK Input-Output Tables and ONS data on total household income. Office for National Statistics (2023), 'UK Input-Output Analytical Tables, industry by industry (2019 data)'.  
Source: Oxera.



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