



**TOURISM
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Boosting Accommodation Supply and Affordability During Major Events

A report assessing Airbnb's role in boosting tourism and supporting regional destinations during major events in the UK

April 2024



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April 2024

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Executive Summary

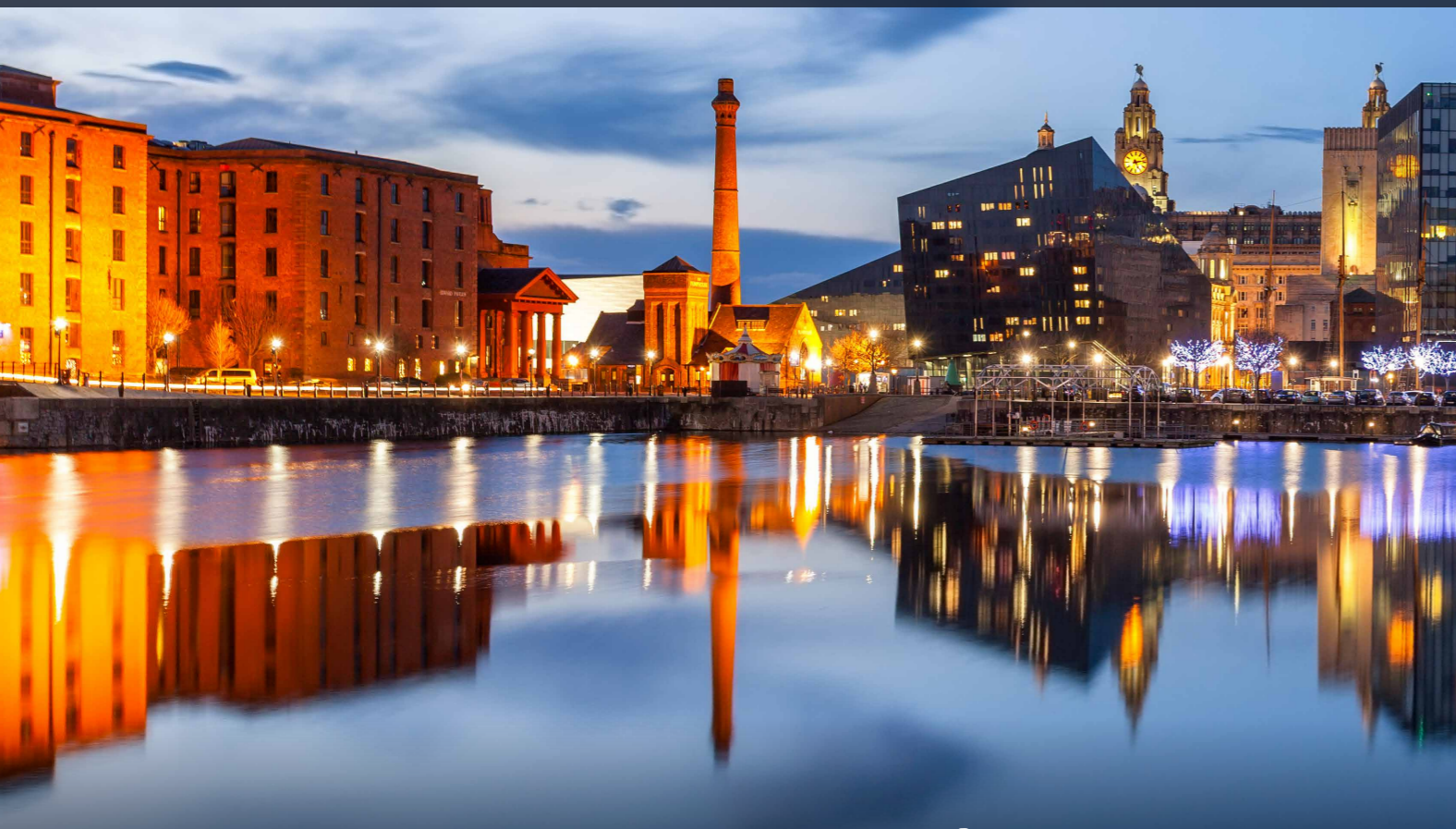
BOOSTING ACCOMMODATION SUPPLY AND AFFORDABILITY DURING MAJOR EVENTS

The UK has built a global reputation for hosting major cultural, sporting, and political events, which has helped to showcase its thriving cultural economy and boost its presence on the international stage. However, hosting major events can be expensive and resource-intensive. Major events attract a large number of participants and spectators, which can put a strain on infrastructure, especially on hotels and other accommodation, in all but the largest cities in the world.

In this context, Airbnb—an online marketplace for travel booking—offers a flexible accommodation alternative in over 2,700 cities, towns and villages in the UK, helping ease the burden on cities hosting major events without the need for delivering new infrastructure. Oxford Economics was commissioned by Airbnb to assess and quantify the extent to which Airbnb provides greater choice, increases affordability and contributes to the local economy during major events in the UK.

Our analysis is framed around three case studies that reflect specific one-off events:

- the **COP26 Conference** hosted in Glasgow in 2021 (COP26);
- the **Birmingham 2022 Commonwealth Games** (CWG); and
- the **European Song Contest** hosted in Liverpool in 2023.



KEY FINDINGS

1. Meeting accommodation demand sustainably

- Airbnb listings played a crucial role in meeting accommodation needs during the events.
- Notably, there were **17,000 guest nights** booked on Airbnb during the European Song Contest in Liverpool¹, **47,000 guest nights** booked on Airbnb during CWG in the Birmingham area², and **74,000 guest nights** booked on Airbnb during COP26 in Glasgow³.

2. Flexible accommodation supply

- The flexibility of hosting on Airbnb enabled local residents to list their homes or spare rooms on the platform ahead of the events, increasing accommodation options for visitors. Airbnb data shows that the growth rate of listings in the three months leading up to the event, when compared to the same months in 2019⁴, was:
 - **13 percentage points (pp)** higher in Liverpool ahead of the European Song Contest,
 - **47pp** higher in the Birmingham area ahead of CWG, and
 - **73pp** higher in Glasgow ahead of COP26.
- This increased activity was pivotal in helping the cities meet the heightened demand.
- The flexibility of hosting on Airbnb is particularly apparent in the increase in private rooms listed ahead of the events. By utilising unused space in their homes, private rooms enable Hosts to benefit directly from the increased demand, while offering budget-friendly accommodation catering to different needs and group sizes, such as solo-travellers. The growth rate of private room listings in the three months preceding the event significantly surpassed the corresponding months in 2019, increasing by:
 - **29pp** in Liverpool ahead of the European Song Contest,
 - **59pp** in the Birmingham area ahead of CWG, and
 - **113pp** in Glasgow ahead of COP26.
- The COVID-19 pandemic-induced travel restrictions led to a decline in tourism and associated supply shifted prior to the COP26 conference. The rise in listings preceding COP26 also captures the recovery in supply in the months leading up to the event.
- According to Airbnb data, the majority of listings added prior to the event⁵ were from casual home sharers taking advantage of the event-related demand, rather than dedicated short-term let Hosts. Most Hosts let out their properties for less than 90 days over the following year. This highlights Airbnb's adaptability in addressing fluctuating demand. Specifically, of the listings added prior to the event, the share of private rooms or entire home listings growth by casual home sharers was:
 - **92%** in Liverpool during the European Song Contest,
 - **90%** in the Birmingham area during CWG, and
 - **94%** in Glasgow during COP26.

¹ The geographical area defined as Liverpool which was considered for the European Song Contest contains the following local authorities: City of Liverpool, Knowsley, St Helens, Sefton, and Wirral.

² The geographical area, defined as the Birmingham area, which was considered for the CWG contains the following local authorities: Birmingham City, Coventry City, Dudley Metro Borough, Sandwell Metro Borough, Solihull Metro Borough, Walsall, and City of Wolverhampton. Collectively, these local authorities make up the West Midlands Combined Authority.

³ The geographical area, defined as Glasgow, which was considered for the COP26 Conference contains the following local authorities: Glasgow City, East Dunbartonshire, East Renfrewshire, North Lanarkshire, Renfrewshire, South Lanarkshire, and West Dunbartonshire.

⁴ 2019 was chosen as the reference year for comparisons to avoid potential distortions caused by the COVID-19 pandemic and associated travel disruptions.

⁵ Out of all listings added from 90 days before the events

- The flexibility enabled by Airbnb helped to accommodate guests to the region visiting for the event. To illustrate the importance of this flexibility to host cities, we estimated the equivalent number of hotel rooms to accommodate all guests booked on Airbnb on nights when demand was at its highest during the event. Our analysis reveals host cities would have required:

- 1,300 hotel rooms** during the European Song Contest,
- 5,000 hotel rooms** during CWG, and
- 19,000 hotel rooms** during COP26.

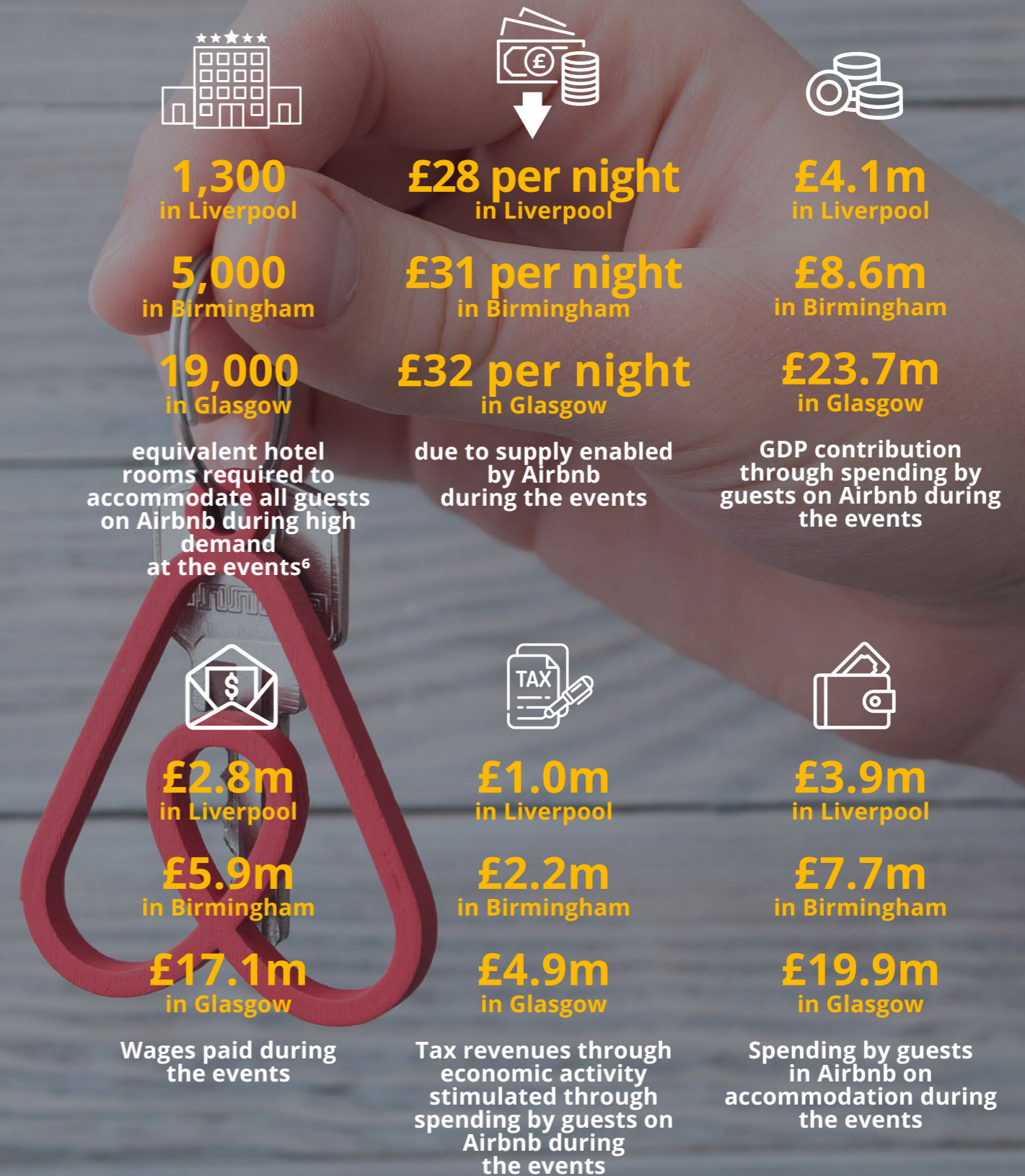
3. Reduction in overall accommodation prices

- We estimate that, due to increased options for travellers and increased competition amongst providers, accommodation listed on Airbnb helped reduce overall accommodation prices by:
 - £28 per night** during the European Song Contest in Liverpool
 - £31 per night** during CWG in the Birmingham area
 - £32 per night** during COP26 in Glasgow

4. Significant economic contribution

- The accommodation spending by guests on Airbnb provided valuable income to local Hosts, thereby helping retain visitor spending within the community. Airbnb guests also support the local economy by spending on various products and services like dining and shopping, thereby contributing to sales for local businesses and job opportunities.
- Overall, spending by guests on Airbnb during these events is estimated at:
 - £3.9 million** during the European Song Contest
 - £7.7 million** during CWG
 - £19.9 million** during COP26

BENEFITS OF AIRBNB - ACROSS ALL THREE CASE STUDIES



⁶ The estimates assume an average of 1.5 guests per hotel room booking, which is in line with previous estimates of 1.5 to 2 rooms per booking based on previous work by Oxford Economics on average room occupancy. The equivalent hotel room estimates presented in the table highlight the importance of flexibility on Airbnb during events, and should be treated as indicative.

Introduction

Home sharing, such as properties booked via Airbnb, has emerged as a leading alternative to traditional tourist accommodation in the UK. The Airbnb platform enables locals to easily participate in home sharing by offering spare rooms or renting out their properties, providing a range of flexible accommodation options. The flexibility of hosting on Airbnb is particularly helpful during one-off major events, and mitigates the need for extensive infrastructure investments to accommodate the surging numbers of visitors during these events.

Oxford Economics was commissioned by Airbnb to assess and quantify the extent to which Airbnb helps boost accommodation supply, increase affordability for travellers, and support the local economy during major events in the UK. Our analysis is framed around three case studies that reflect specific one-off events, namely:

- the **European Song Contest** hosted in Liverpool in 2023;
- the **Birmingham 2022 Commonwealth Games (CWG)**; and
- the **COP26 Conference** hosted in Glasgow in 2021.

Report Structure

In the following section, we assess how Airbnb helps unlock economic value for visitors and the local economy during major events. We then looked at the results from our analysis for each of the three case study events in the subsequent sections. A technical annex describes our methodology in greater detail.



How flexible supply on Airbnb can unlock economic value

The benefits of flexible supply are particularly apparent during periods of surges in demand, such as peak-travel seasons, but also during one-off major events. While some amount of traditional accommodation infrastructure can be set up to take advantage of seasonal demand, one-off events pose a particular challenge in creating accommodation options to meet the surge in demand in a sustainable manner.

The flexible supply enabled by Airbnb and other sharing economy platforms helps accommodate the surge in demand during one-off major events. The greater choice of accommodation and competition between accommodation providers also stimulates additional demand in certain cities.

Fig. 1. How travel on Airbnb helps reduce prices through greater choice



Source: Airbnb, Oxford Economics

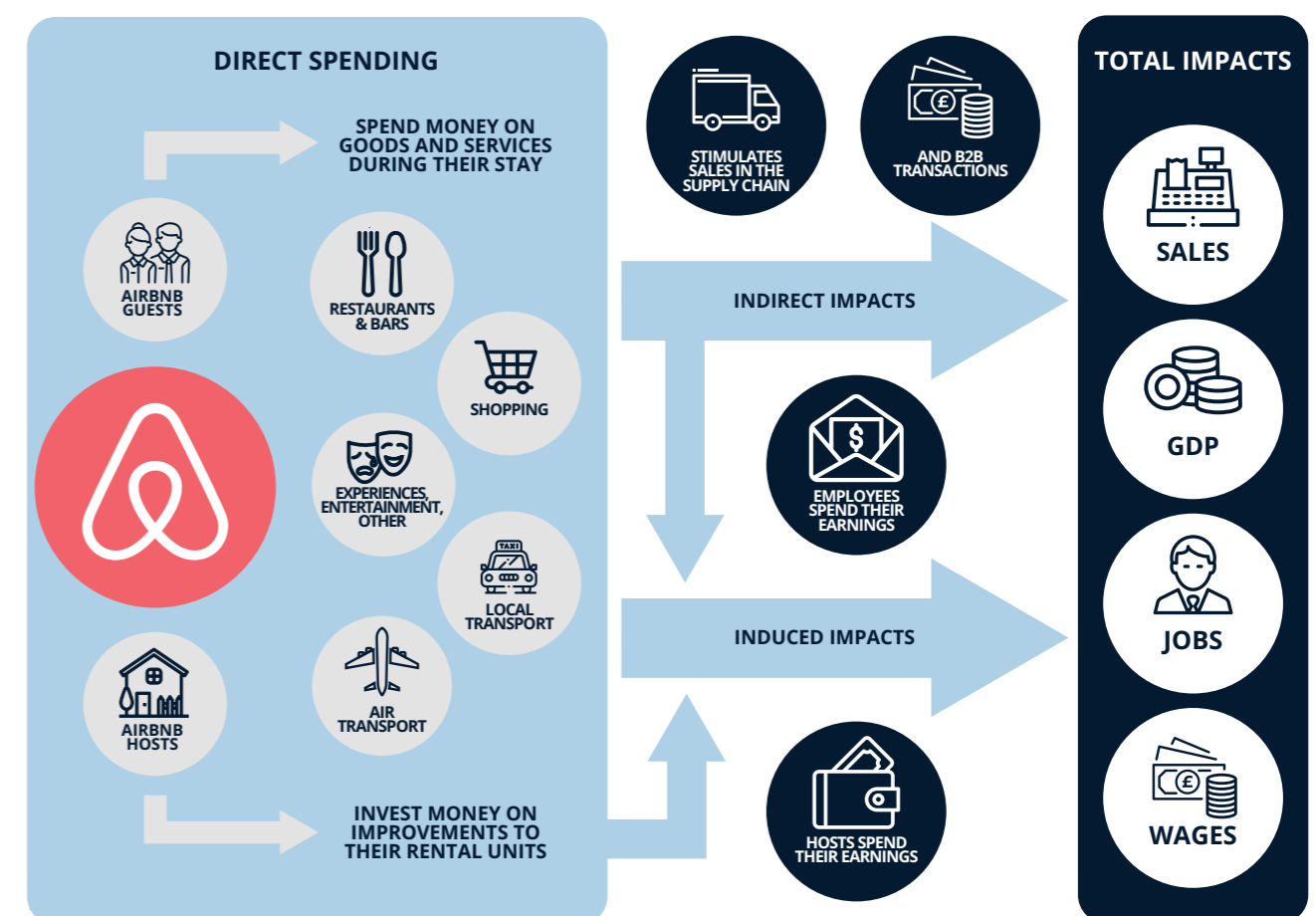
The increase in competition for accommodation during events helps lower prices and increase overall visitor satisfaction. We utilised Airbnb data along with data from Smith Travel Research (STR), a hotel performance data provider, to construct a statistical model to assess the accommodation price reduction associated with travel booked on Airbnb during the three events: the European Song Contest hosted in Liverpool in 2023, the Birmingham 2022 Commonwealth Games, and the COP26 Conference hosted in Glasgow in 2021. Additionally, we measured the impact on visitor satisfaction, quantifying it in monetary terms using a concept called “consumer surplus”. This metric encapsulates how lower prices and greater choice generated additional value for all visitors attending the event (i.e., not just guests who booked on Airbnb), particularly for those incentivised to visit due to lower prices and increased options.

The accommodation spending by guests booking on Airbnb provided valuable income to local Hosts, thereby supporting visitor spending within the community. Further, guests travelling on Airbnb spend with local businesses on a wide range of products and services. For example, these guests spend in nearby shops and restaurants, helping to support the businesses that create strong communities. We estimated the amount of spending by guests on Airbnb during the events studied using primarily Tourism Satellite Account data, published by the ONS, and Airbnb operational and survey data. Estimates were then validated using supplemental Visit Britain survey data on domestic overnight guests and data from the International Passenger Survey.

Economic impact involves quantifying the total expenditure made by guests who booked on Airbnb in the destination economy, and estimating three types of economic activity it stimulates:

- **Direct impact** relates to the value added by Hosts on Airbnb and other businesses in facilitating stays of guests who booked on Airbnb.
- **Indirect impact** is the economic activity and employment stimulated along the supply chain that supports those front-line businesses.
- **Induced impact** comprises the wider economic benefits that arise from the payments of wages to the employees of businesses serving guests who booked on Airbnb, and other businesses in their supply chain. It also includes the share of the income of Hosts on Airbnb that is spent in the local economy. In our analysis, we also include the economic activity stimulated in the supply chains of these retail, leisure and other outlets.

Fig. 2. How is the total economic contribution of guest spending on Airbnb measured?



INSIGHTS FROM UK CASE STUDIES

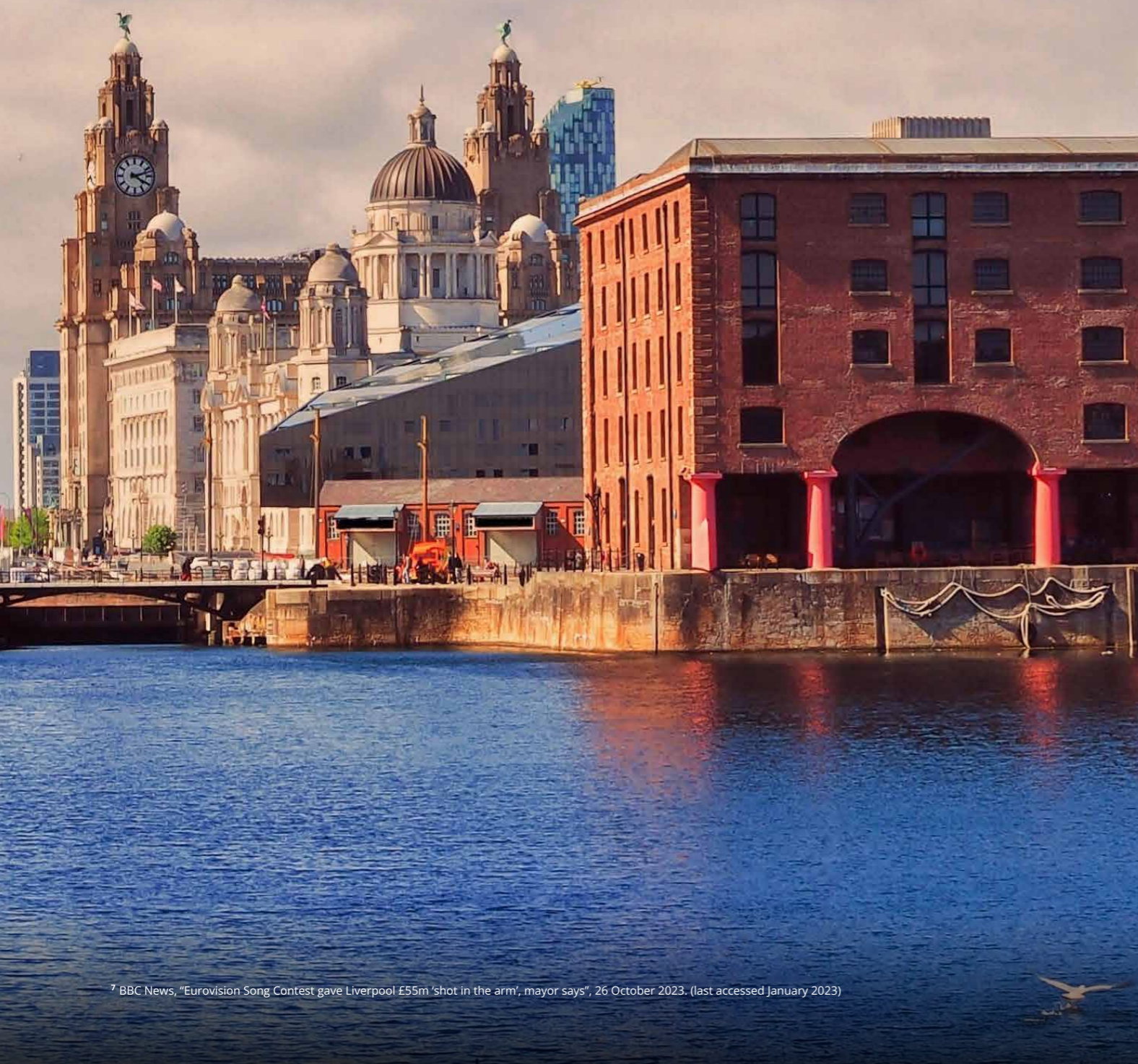
In the following sections, we present findings from three case studies on one-off events:

- the **European Song Contest** hosted in Liverpool in 2023;
- the **Birmingham 2022 Commonwealth Games**; and
- the **COP26 Conference** hosted in Glasgow in 2021.



The European Song Contest 2023 in Liverpool

In May 2023, Liverpool hosted the 67th edition of the European Song Contest. For the first time in over 40 years, the contest was not hosted by the previous year's winning country, Ukraine, due to the conflict. The city benefited from additional exposure as the event coincided with "Eurofest", a cultural festival showcasing Ukrainian and British artists. According to research commissioned by Liverpool City Council, more than 300,000 people attended contest-related events during the month.⁷



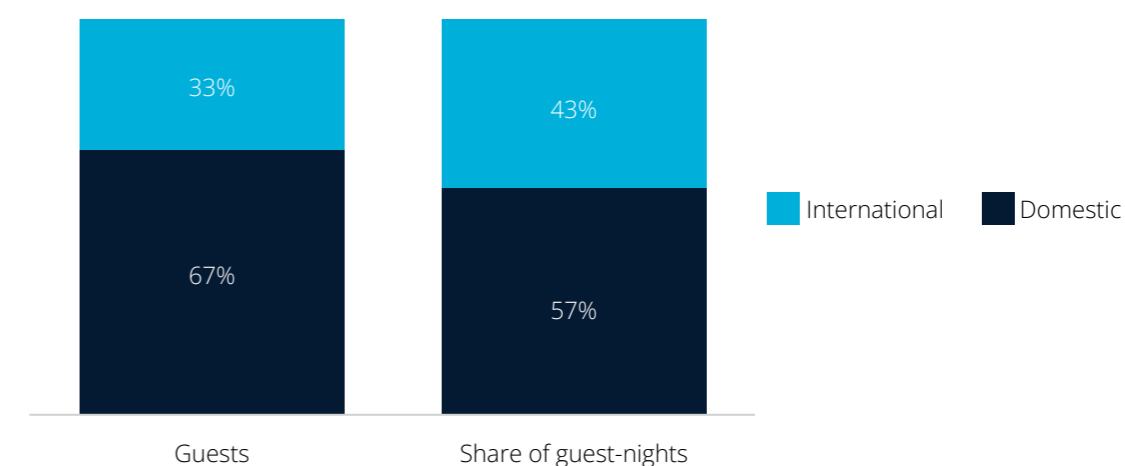
⁷ BBC News, "Eurovision Song Contest gave Liverpool £55m 'shot in the arm', mayor says", 26 October 2023. (last accessed January 2023)

A diverse profile of visitors stayed in listings booked on Airbnb during the contest

Our analysis indicates that around 5,900 visitors stayed in listings booked on Airbnb in Liverpool⁸ during the five-day period of the event in May 2023. Collectively, these visitors generated over 17,000 guest nights (i.e., number of nights per guest) which brought significant economic benefits to the area.

UK visitors accounted for nearly two-thirds of guests who booked their stay on Airbnb in the area during the period. The remainder (33%) were international visitors. These guests tended to stay longer at their accommodation compared with domestic guests. As a result, international visitors generated around 43% of all guest nights on Airbnb in the area during the event period.

Fig. 3. Visitors to Liverpool during the European Song Contest (% share of guests and of guest nights)



Source: Airbnb, Oxford Economics

⁸ The geographical area, defined as Liverpool, which was considered for the European Song Contest contains the following local authorities: City of Liverpool, Knowsley, St Helens, Sefton, and Wirral.

A BOOST TO THE LOCAL ECONOMY

Gill is a Superhost who hosts an entire apartment out of her primary home near Crosby.

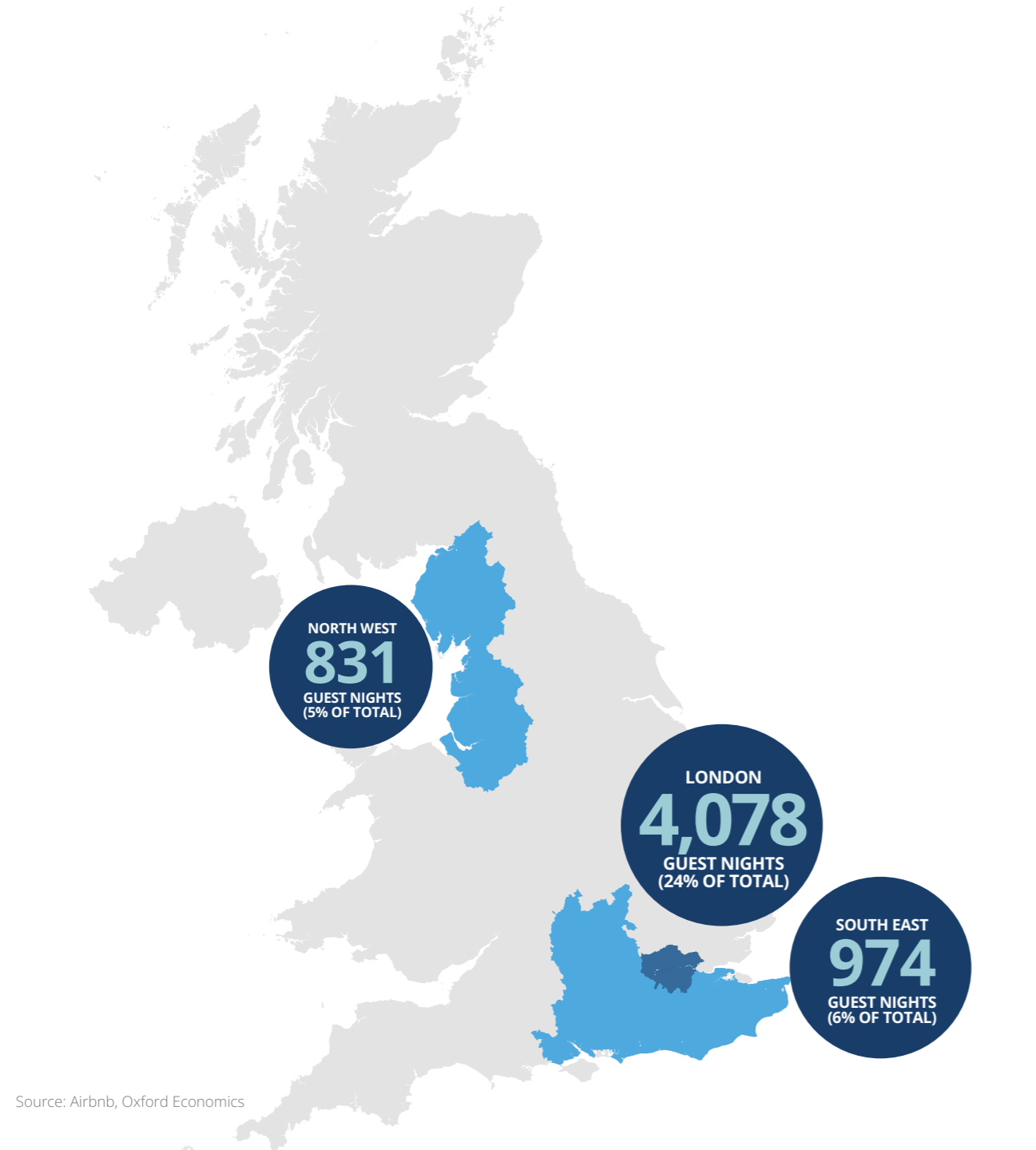
She says, *"The city came alive during the European Song Contest. We hosted a lovely family from Germany. It was brilliant to see Liverpool so vibrant and full of people experiencing our city for the first time."*



During the event, more than a quarter (27%) of all guests on Airbnb—associated with nearly a quarter (24%) of all guest nights on Airbnb—were travellers from London, making them the most important source of Airbnb bookings during the period. These visitors were in the area for fewer nights compared with other domestic visitors staying 2.6 nights on average compared with 2.9 nights by guests from elsewhere in the UK. This finding highlights the importance of Airbnb in helping destinations attract different types of visitors, some of whom can be higher yield.

Listings in the area were also particularly popular among visitors from the South East and North West of England, accounting for 6% and 5%, respectively, of all guest nights booked on Airbnb during the period.

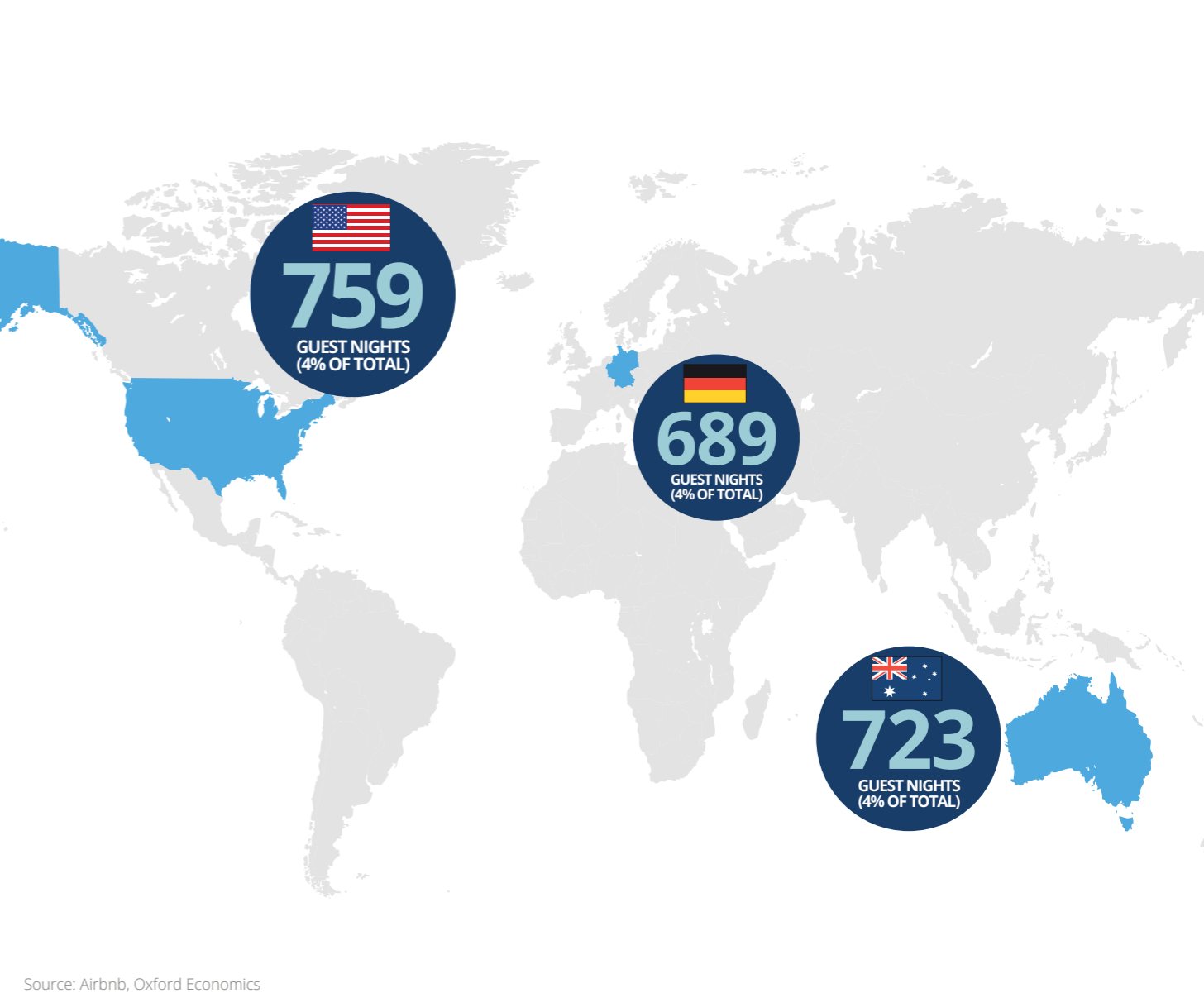
Fig. 4. Domestic visitors to Liverpool during the European Song Contest, by origin area (domestic)



There was a diverse mix of international visitors who used the Airbnb platform during the contest which demonstrates the diversity of the event and the broader appeal of Liverpool. US visitors followed by those from Australia and Germany accounted for the largest share of international guest nights on Airbnb during the period.

A significant share of guests stayed outside the City of Liverpool local authority area. Airbnb listings in Sefton, Wirral, Knowsley and St. Helens achieved over a fifth of guest nights booked on Airbnb in Liverpool during the event. This activity generated economic benefits beyond the City of Liverpool local area and provided consumers with extra choice during a period of particularly strong demand for accommodation in the city centre.

Fig. 5. International visitors to Liverpool during the European Song Contest event, by origin country (international)



The flexibility of Hosting on Airbnb contributed to easing the pressure on accommodation infrastructure

An important benefit of Airbnb for local economies is the flexibility for Hosts providing accommodation that matches fluctuating supply and demand. Active listings on Airbnb in Liverpool grew 13pp faster in the three months preceding the event in May 2023 compared to the growth observed in the same period of 2019⁹. This heightened growth in 2023 underscores the advantages of supply flexibility in meeting the increased demand for accommodation.

The importance of flexibility in enabling local residents to list their properties is especially evident in the growth of private room listings in the months leading up to the event. Specifically, private room listings in Liverpool on Airbnb growth between February and May 2023 was 29pp higher compared to the growth seen during the same months in 2019.

During the European Song Contest, most of the increased listings in Liverpool in the three months leading up to the event came from casual home sharers, i.e., those who let out their properties for less than 90 days over the following year, rather than dedicated short-term let hosts. Specifically, of all the listings in Liverpool added on Airbnb in the three months leading up to the event, the share of private rooms and entire homes listed by casual home sharers was 92%, highlighting Airbnb's adaptability in meeting additional demand.

The additional accommodation supply linked to the event contributed to alleviating the strain on infrastructure in Liverpool. Our analysis indicates that without the listings on Airbnb, Liverpool would have had to source an estimated 1,300 hotel rooms to accommodate all guests when demand was at its peak during the event¹⁰.

Airbnb helped reduce accommodation prices by £28 per night during the European Song Contest

We also find that the supply offered by Hosts on Airbnb helped to moderate accommodation costs in Liverpool by around £28 per night. This meant that the average rate for Airbnb listings and hotels during the contest was 15% lower per night compared with the counterfactual scenario if Airbnb listings were not available during the period.

In addition, a more competitive accommodation market provided consumers with greater choice. This meant that more visitors maximised their enjoyment and engagement by staying in accommodation which best suited their requirements. For example, families or groups of friends may have preferred staying together in entire homes or apartments, thus enhancing their overall experience. Without the supply generated by Hosts on Airbnb, some visitors may not have chosen to stay overnight, which may have detracted from their overall experience.

The value to consumers generated by stays booked on Airbnb can be measured by calculating consumer surplus. Using this method, our analysis indicates that the overall economic and satisfaction value of Airbnb listings to Liverpool during the event period led to a consumer surplus of £1.4 million.

⁹ 2019 was chosen as the reference year for comparisons to avoid potential distortions caused by the COVID-19 pandemic and associated travel disruptions.

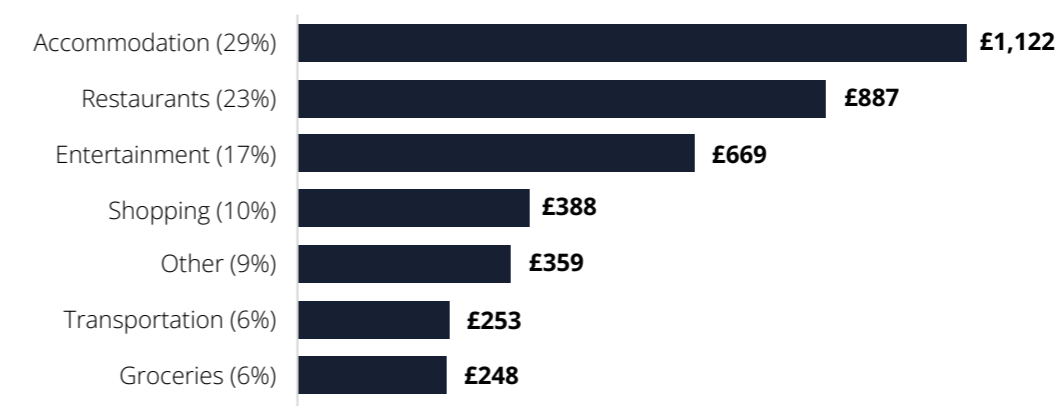
¹⁰ The estimates assume an average of 1.5 guests per hotel room booking, which is in line with previous estimates of 1.5 to 2 rooms per booking based on previous work by Oxford Economics on average room occupancy. The equivalent hotel room estimate highlights the importance of flexibility on Airbnb during events, and should be treated as indicative.

Spending by guests booking on Airbnb generated revenue for local hosts, businesses and supported jobs

The overall expenditure of guests who stayed in listings booked on Airbnb in Liverpool during the European Song Contest period is estimated to be around £3.9 million. This includes spend on accommodation, which benefited Hosts directly, and additional spend on goods and services in the area, including food, drink, shopping, and transport.

Accommodation expenditure represented 29% of the overall expenditure with the remaining £2.8 million—spent at non-accommodation businesses. Restaurants and entertainment providers, including attractions and tour operators, gained the most from the spend of guests on Airbnb, achieving £887,000 and £669,000 of spend, respectively.

Fig. 6. Spending by guests booking on Airbnb in Liverpool during the European Song Contest (%s indicate share of total)



Source: Airbnb, Oxford Economics

BENEFITS OF AIRBNB - EUROPEAN SONG CONTEST



1,300
equivalent hotel rooms
required to accommodate
all guests on Airbnb during
high demand at the event



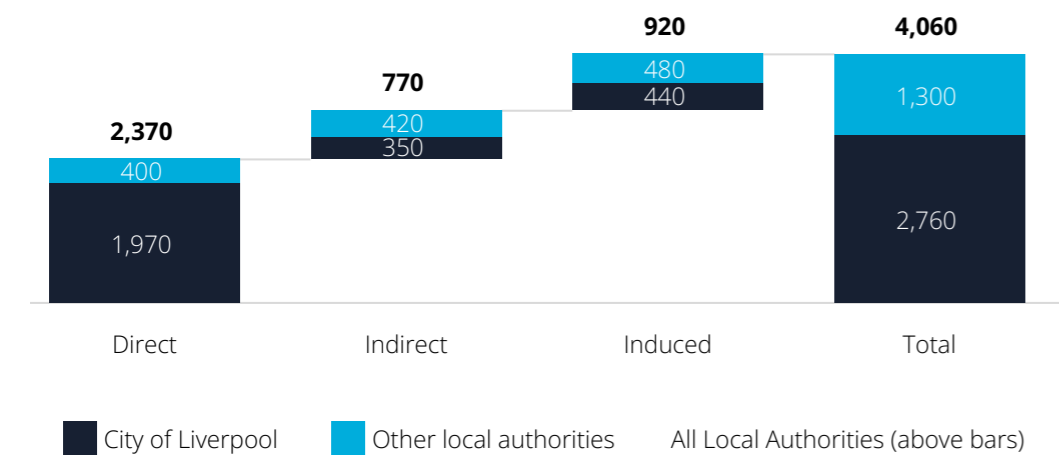
£28 per night
15% cheaper
due to supply enabled
by Airbnb
during the event

Expenditure by Airbnb guests in Liverpool boosted GDP by nearly £3.9 million in overall terms. This includes economic benefits linked to direct, indirect, and induced effects of their spending in the area. The direct impact through expenditure by Airbnb guests in the local economy generated a contribution to GDP of over £2.4 million, which helped to support employment for over 36 workers during the year (full-time equivalent, or FTEs).

The economic impact through guest expenditure on Airbnb was most pronounced in the City of Liverpool as most Airbnb listings were located there. The overall GDP contribution generated by Airbnb-linked spend in the City of Liverpool local authority area was almost £2.8 million. Nearly 70% of this economic impact was generated through expenditure by guests on Airbnb in the City of Liverpool. In employment impact terms, Airbnb-linked spend in the Merseyside capital supported annual employment for nearly 40 people.

Surrounding areas also benefited from Airbnb-linked spend. Overall, the economic activity generated by guests on Airbnb boosted GDP by over £1.3 million in the other local authorities of the Liverpool area.

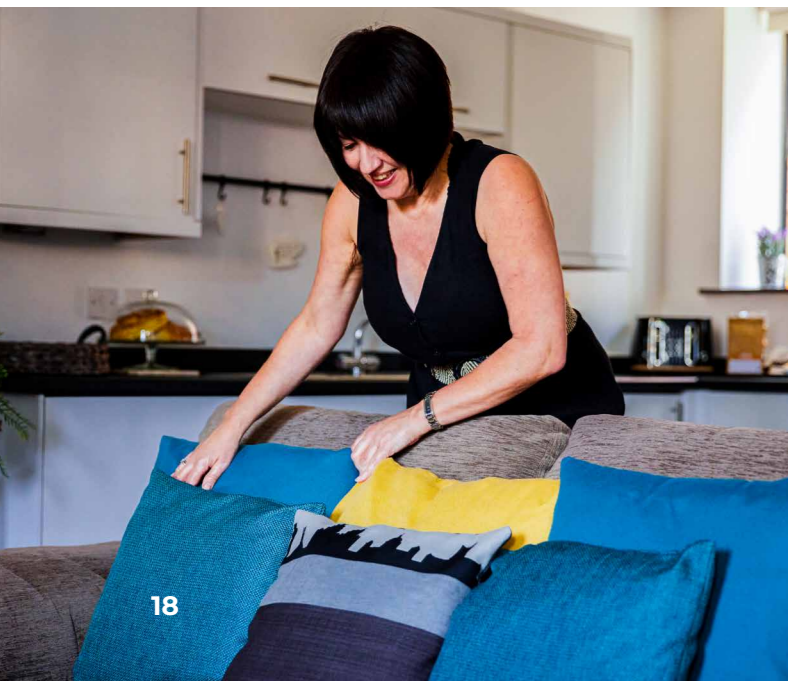
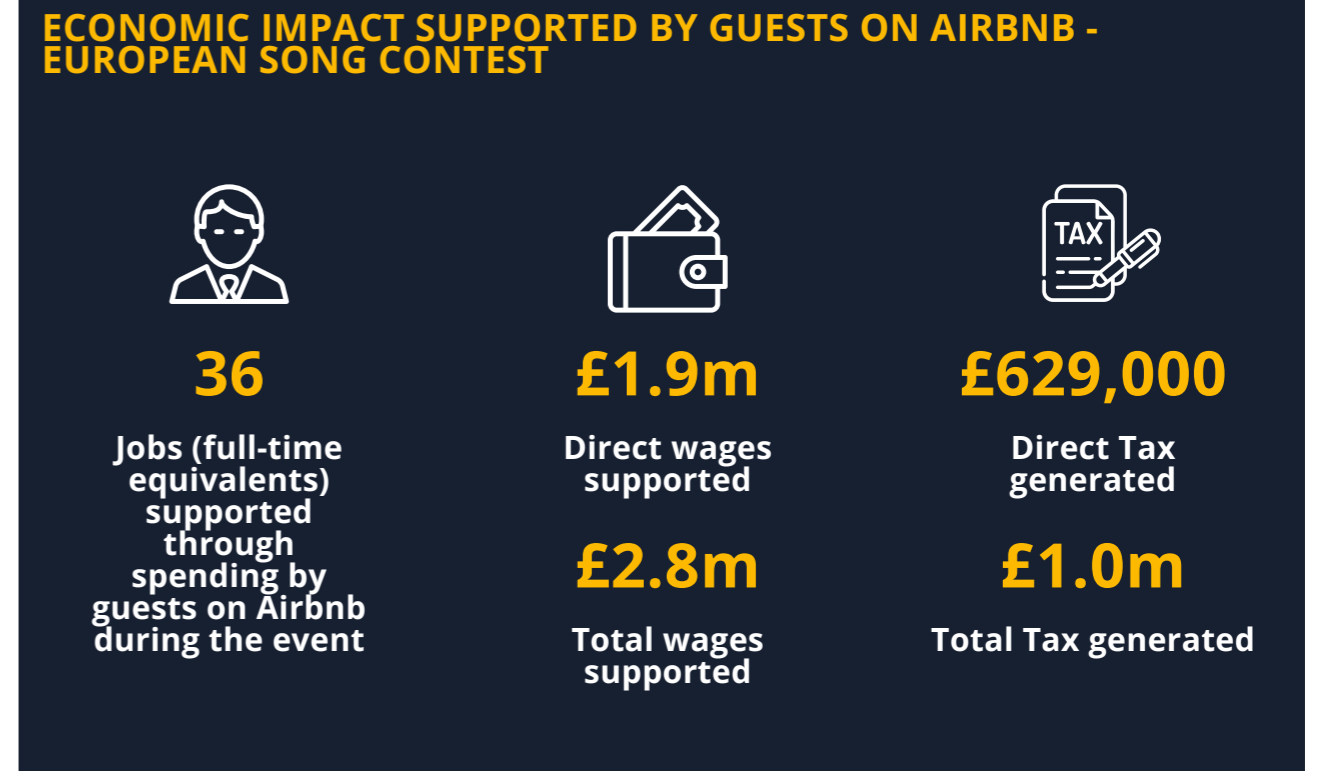
Fig. 7. GDP contribution by local authority area and channel supported through spending by Airbnb guests during the contest¹¹ (GDP contribution, £ '000s)



Source: Airbnb, Oxford Economics

¹¹ The other local authority areas included in the chart are: Sefton, Wirral, Knowsley, and St. Helens.

The economic activity generated by listings booked on Airbnb helped to support wages and generated tax revenue for HMRC. Overall, it is estimated that Airbnb-linked spending in Liverpool during the European Song Contest contributed £2.8 million to local and national wages. This included impacts on wages of over £1.9 million for personnel directly serving guests on Airbnb. The resultant tax value to the government from these wages and the revenue guests on Airbnb generated for businesses amounted to around £1.0 million.



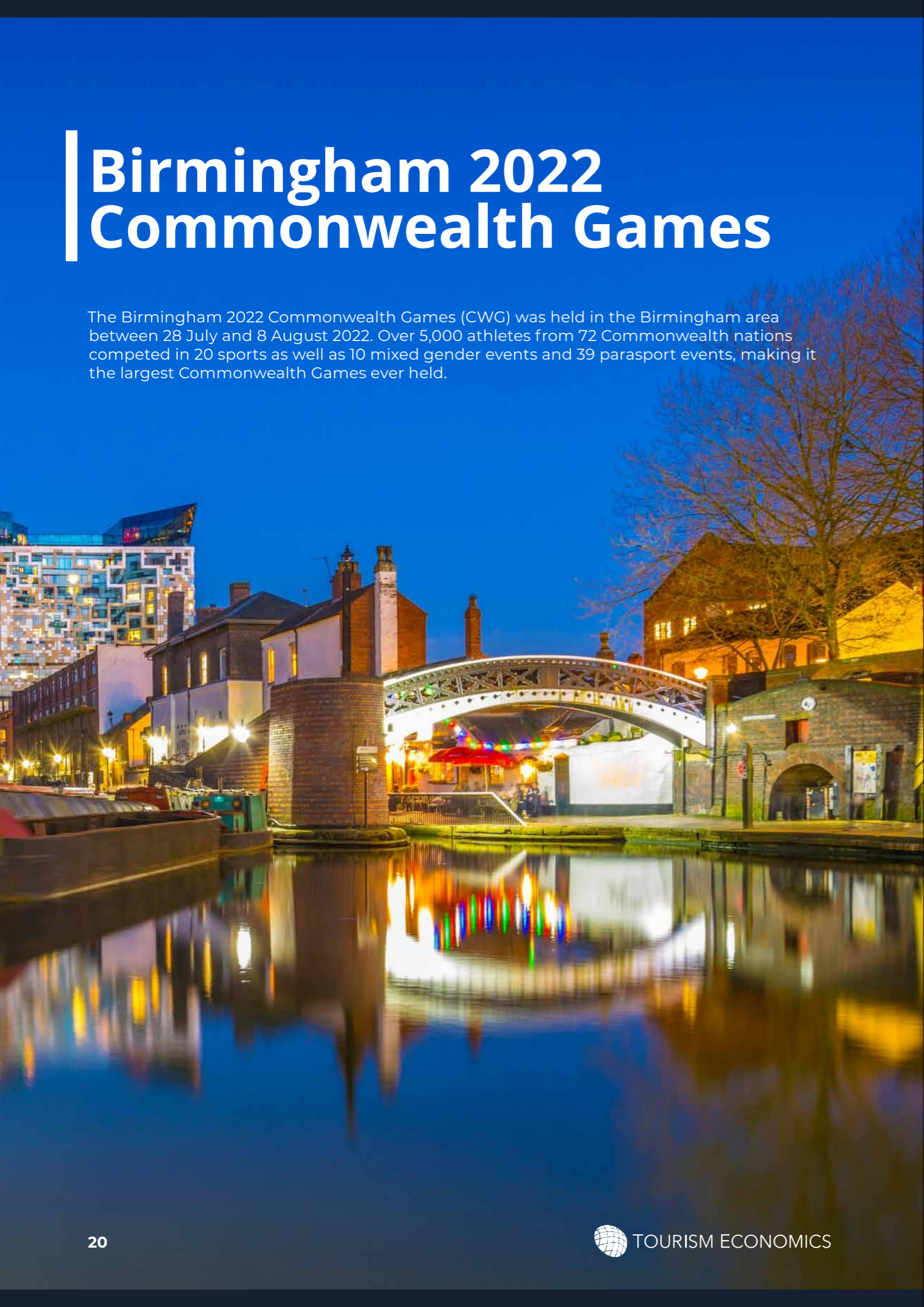
A BOOST TO THE LOCAL ECONOMY

Gill, Superhost on Airbnb near Crosby, adds, *"Hosting in the suburbs of cities is great for people who just want to nip into the city but then come back and spend their evening at local independent places and get the best of both worlds."*



Birmingham 2022 Commonwealth Games

The Birmingham 2022 Commonwealth Games (CWG) was held in the Birmingham area between 28 July and 8 August 2022. Over 5,000 athletes from 72 Commonwealth nations competed in 20 sports as well as 10 mixed gender events and 39 parasport events, making it the largest Commonwealth Games ever held.

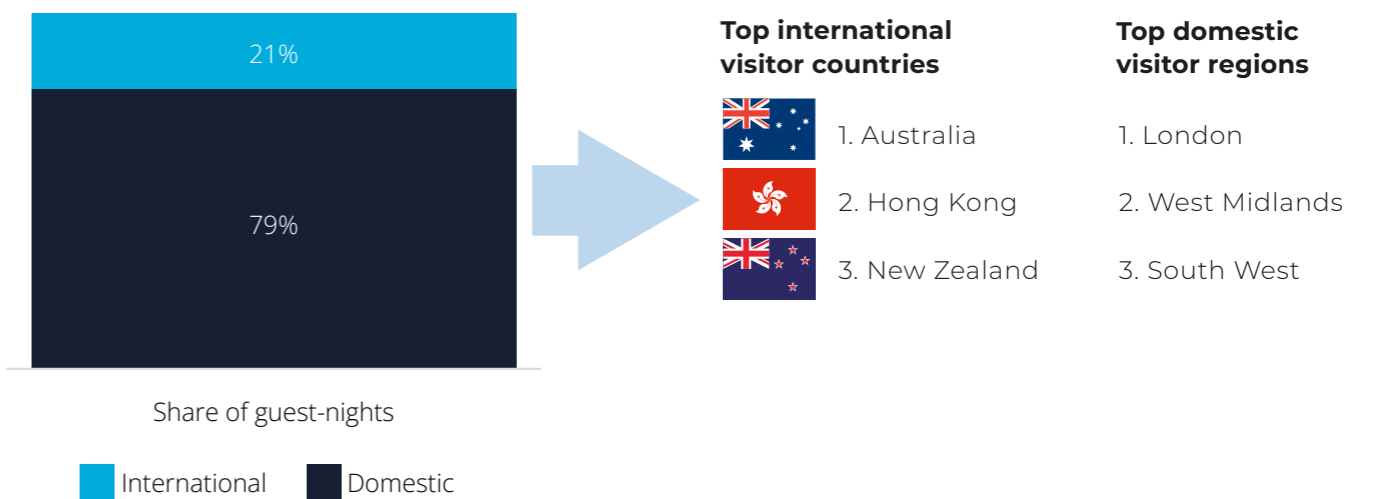


Hosts on Airbnb welcomed guests from the UK and beyond

Airbnb Hosts in Birmingham and neighbouring areas¹², collectively referred to as the Birmingham area in this section, welcomed over 14,000 guests during the 11 days of the event. This equated to around 47,000 guest nights as visitors stayed an average of three nights at their accommodation.

Listings on Airbnb in the Birmingham area attracted event goers from across the UK and overseas. Domestic visitors accounted for the vast majority of demand making up nearly 80% of all guest nights during the CWG period. Meanwhile, local Hosts on Airbnb welcomed over 1,600 international guests during the event which led to nearly 10,000 guest nights.

Fig. 8. Visitors to the Birmingham area during CWG (% Airbnb guest-nights)

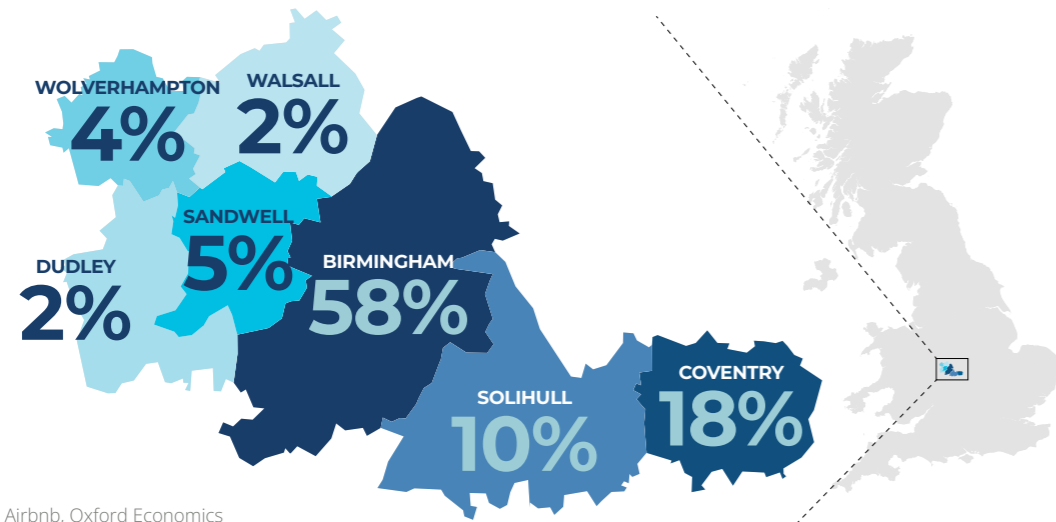


Source: Airbnb, Oxford Economics

Visitors stayed in listings booked on Airbnb across the West Midlands. CWG spanned 15 venues across the West Midlands attracting visitors to the wider region. Approximately 40% of guest nights on Airbnb were in six neighbouring local authorities, including Coventry and Solihull, which benefited from major venues like Coventry Arena and the National Exhibition Centre (NEC). This demonstrates how Airbnb helped Hosts provide accommodation options across the wider Birmingham area, making it easier for visitors to stay near venues and explore the local area. The remaining guest nights on Airbnb were in the Birmingham City Council area, which included venues such as Alexander Stadium, the location for the opening and closing ceremonies.

¹² The neighbouring areas, including Birmingham, make up the West Midlands Combined Authority (WMCA) which contains the following local authorities: Birmingham City, Coventry, Dudley Metro Borough, Sandwell Metro Borough, Solihull Metro Borough, Walsall, and the City of Wolverhampton.

Fig. 9. Accommodation in the Birmingham area during CWG (% guest distribution)



Source: Airbnb, Oxford Economics

The flexibility of hosting on Airbnb contributed to alleviating the strain on accommodation infrastructure during the event

A key feature of Airbnb is the flexibility it affords Hosts to list their spaces—and adjust their availability—in response to shifting demand. This enables Hosts on Airbnb to boost accommodation supply during periods of intense demand, mitigating the need for substantial investment in accommodation infrastructure. Airbnb data shows that listings growth in the Birmingham area between May and August 2022 was 47pp higher than the growth observed in the same months of 2019¹³. Our analysis indicates that without the listings on Airbnb, 5,000 hotel rooms would have been required in the Birmingham area to adequately accommodate all guests when demand was at its peak during CWG¹⁴.

¹³ 2019 was chosen as the reference year for comparisons to avoid potential distortions caused by the COVID-19 pandemic and associated travel disruptions.

¹⁴ The estimates assume an average of 1.5 guests per hotel room booking, which is in line with previous estimates of 1.5 to 2 rooms per booking based on previous work by Oxford Economics on average room occupancy. The equivalent hotel room estimate highlights the importance of flexibility on Airbnb during events and should be treated as indicative.

LOCAL ENGAGEMENT AND EVENT HOSPITALITY

Tim Herbert is a private room Superhost in Kings Heath. He decided to host on Airbnb to supplement his income, and hosted athletes and volunteers during the Commonwealth Games. He says,

“I was full every night of the Birmingham Commonwealth Games and it was amazing talking to my guests, who were saying ‘I had no idea this was such a lovely city, I’ll be back.’”



BENEFITS OF AIRBNB - 2022 COMMONWEALTH GAMES



The range and diversity of accommodation is an appealing aspect of booking on Airbnb which helps to drive demand. During the CWG period, most listings on Airbnb were entire homes or apartments, accounting for 76% of all available accommodation. The next most common type was private rooms, making up 24% of available stock. Private rooms encourage Hosts and guests to interact, with Hosts often sharing local recommendations, tips, and insights about the event, contributing to a positive guest experience and helping to create a stronger sense of community pride.

The significant flexibility of Airbnb in allowing local residents to list their properties and spare rooms is especially evident in the growth of private room listings in the months leading up to the event. Specifically, private room listings growth in the Birmingham area between May and August was 59pp higher in 2022 compared to the same period in 2019.

Airbnb data shows that ahead of CWG, 90% of the increase in listings in the Birmingham area was attributable to casual home sharers, that is Hosts who let out their properties or spare rooms for less than 90 days over the following year. This highlights the importance of flexibility on Airbnb to accommodate demand during the event.

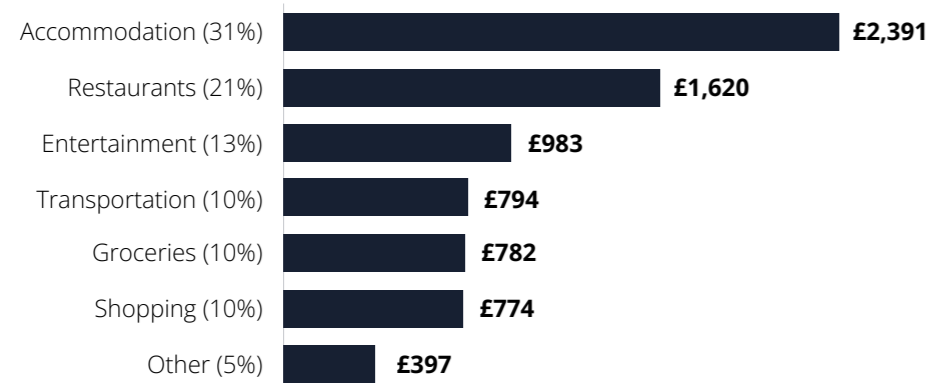
Our analysis reveals that the greater availability of accommodations on Airbnb helped reduce average rates in the area by approximately £31 per night. Put differently, without the lodging options offered on Airbnb, prices for other accommodations would have been higher. The increase in overall satisfaction and affordability to consumers, measured using “consumer surplus”, was estimated to be £7.5 million. This value reflects not just the money saved by consumers but also the overall satisfaction value they derived from their visit. We estimate that the lower prices encouraged 2,000 attendees to participate in the event by making more affordable accommodation options available. In addition, the accommodation expenditure saved likely encouraged more expenditure on other products and services by visitors in the area.

Guests on Airbnb spent over £7.7 million during CWG

Guests on Airbnb are estimated to have spent over £7.7 million during the 11 days of the games, which benefited the local economy in the Birmingham area. Accommodation accounted for the largest share of this spend generating around £2.4 million. This included valuable earnings for Hosts, which generated direct and indirect economic benefits. The next largest spending category was restaurants as local eating establishments benefited from nearly £1.6 million expenditure by guests on Airbnb during the period. Overall, non-accommodation spending by guests on Airbnb attending CWG was over £5.3 million.

The largest spend impact was by guests from London who contributed over £2.1 million to the local economy, 26% of the total spend by guests on Airbnb during the period. The next largest origin regions by overall spend were visitors from the West Midlands and the South East of England, with each accounting for 8% of total spend. Meanwhile, Australian visitors generated the largest total spend among international origin countries, spending nearly £304,000 in the area.

Fig. 10. Spending by guests on Airbnb during CWG (% share of total, £ '000s)



Source: Airbnb, Oxford Economics

Travel on Airbnb during CWG contributed £8.3 million to UK GDP

The overall contribution in GDP terms of the spend by guests on Airbnb in the Birmingham area during CWG was around £8.6 million. This includes direct, indirect, and induced effects linked to their expenditure. The direct contribution of Airbnb-linked spend was just over £5.0 million. This arose as guests who booked on Airbnb spent money directly on goods and services in the local economy. Additional benefits were generated through indirect and induced effects as this spend led to further economic activity in the supply chain and helped to support wages.

The biggest impact in GDP terms was in the Birmingham City Council local authority area as Airbnb-linked spend contributed £4.5 million to local GDP. This represented over half of the overall GDP contribution of guests on Airbnb during the event. The next biggest impact was in Coventry and Solihull local authority areas with each benefiting from approximately £1 million GDP impact as a result of expenditure in the economy by guests on Airbnb.

Guests staying in entire homes or apartments accounted for most of the GDP contribution supported by guest spending on Airbnb during CWG. Guests staying in entire homes or apartments on Airbnb spent over £6.3 million during CWG. Including direct, indirect, and induced effects, this spend helped to bolster GDP by over £6.9 million. Meanwhile, the spending by guests on Airbnb staying in private rooms was £1.4 million which generated a GDP impact of over £1.6 million.



Guests on Airbnb are estimated to have spent over **£7.7 million** during the 11 days of the games which benefited the local economy in the Birmingham area.

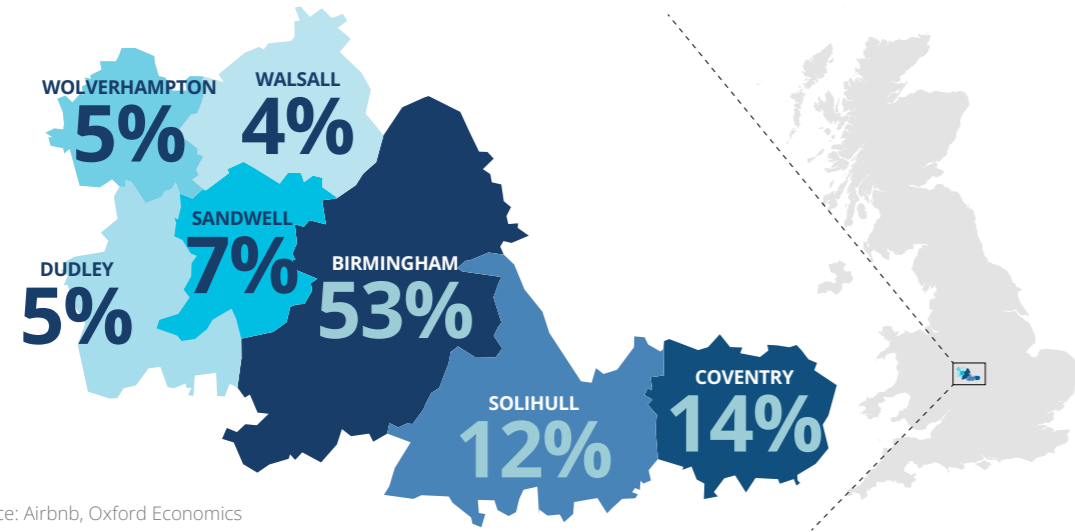


A BOOST TO THE LOCAL ECONOMY

Tim Herbert, private room Superhost on Airbnb in Kings Heath, says,

"A lot of people come into Birmingham to participate in activities, like shows and concerts. While they're here, they will go out to eat in local restaurants. They really are taking part in the local community."

Fig. 11. Distribution of GDP contribution by local authority area of spending by guests on Airbnb during CWG (% of GDP contribution)



Source: Airbnb, Oxford Economics

The overall spend of Airbnb guests staying in the Birmingham area for CWG supported around £5.9 million in employee wages during the 11 days of the event, equivalent to employing 129 full-time workers over a year. This includes direct, indirect, and induced effects of their expenditure. The direct impact of Airbnb-linked spend equated to supporting around £3.9 million in wages, which was nearly 67% of the overall total employment impact. The jobs supported by the overall economic impact of guests on Airbnb generated employment tax revenues of around £2.3 million.

In addition to supporting jobs, Airbnb-linked expenditure associated with CWG generated total wages of over £5.9 million which led to tax revenues of around £2.3 million. Reflecting the significant economic impact of Airbnb guests on the local economy, most of the wages and tax revenue were generated through direct channels. This meant that the direct impact of their expenditure contributed nearly £3.9 million to wages and over £1.3 million to tax revenues.

ECONOMIC IMPACT SUPPORTED BY GUESTS ON AIRBNB - 2022 COMMONWEALTH GAMES



£7.7m

Spending by guests in Airbnb on accommodation during the event



£8.6m

GDP contribution through spending by guests on Airbnb during the event



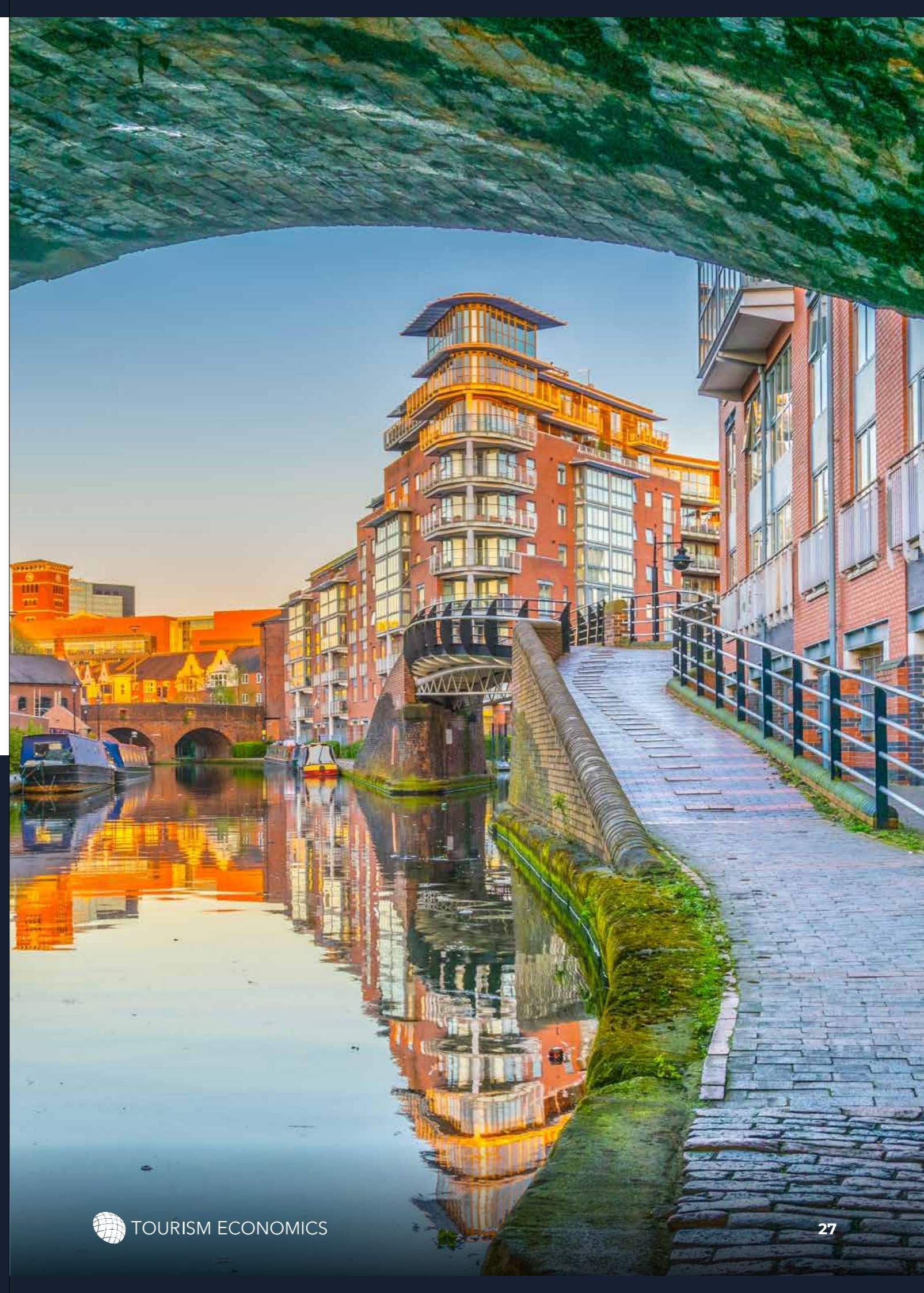
129

Jobs (full-time equivalents) supported through spending by guests on Airbnb during the event



£2.3m

Tax revenues through economic activity stimulated through spending by guests on Airbnb during the event



COP26 Conference in Glasgow

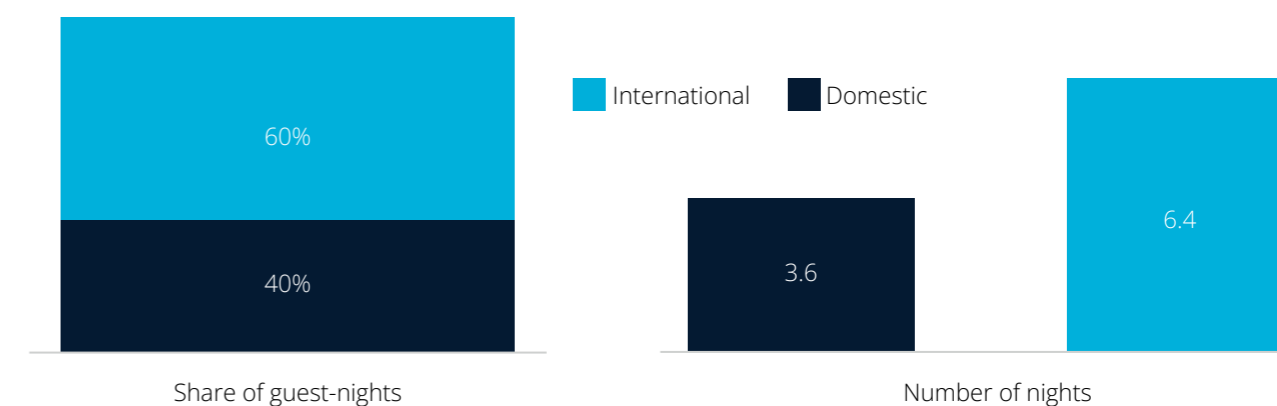
In late 2021, the 26th United Nations Climate Change Conference, known as COP26, took place in Glasgow. Over 40,000 delegates attended the conference which spanned two weeks from 31 October to 13 November.¹⁵ Enhanced commitments regarding climate change actions were expected which raised the overall profile of the event, sparking greater interest among industry and environmental groups. Our analysis indicates that the flexible supply enabled by Hosts on Airbnb facilitated increased participation during this significant event. This occurred as pandemic-related travel restrictions, which affected tourism and accommodation supply in preceding months, were gradually being eased.

Airbnb helped Glasgow to accommodate a global audience during COP26

Our analysis highlights that over 70,000 guest nights were booked on Airbnb in Glasgow during the COP26 period, which equated to an average length of stay of nearly five nights per guest.¹⁶

Underlining the global significance of the event, 60% of guests on Airbnb were from outside of the UK. International visitors tended to stay longer at their accommodation than those from the UK, staying an average of over six nights compared with around 3.6 nights among domestic guests. As a result, international visitors accounted for 60% of all guest nights who booked on Airbnb in the area during the period.

Fig. 12. Visitors and length of stay to Glasgow during COP26 (% guest nights, number of nights)



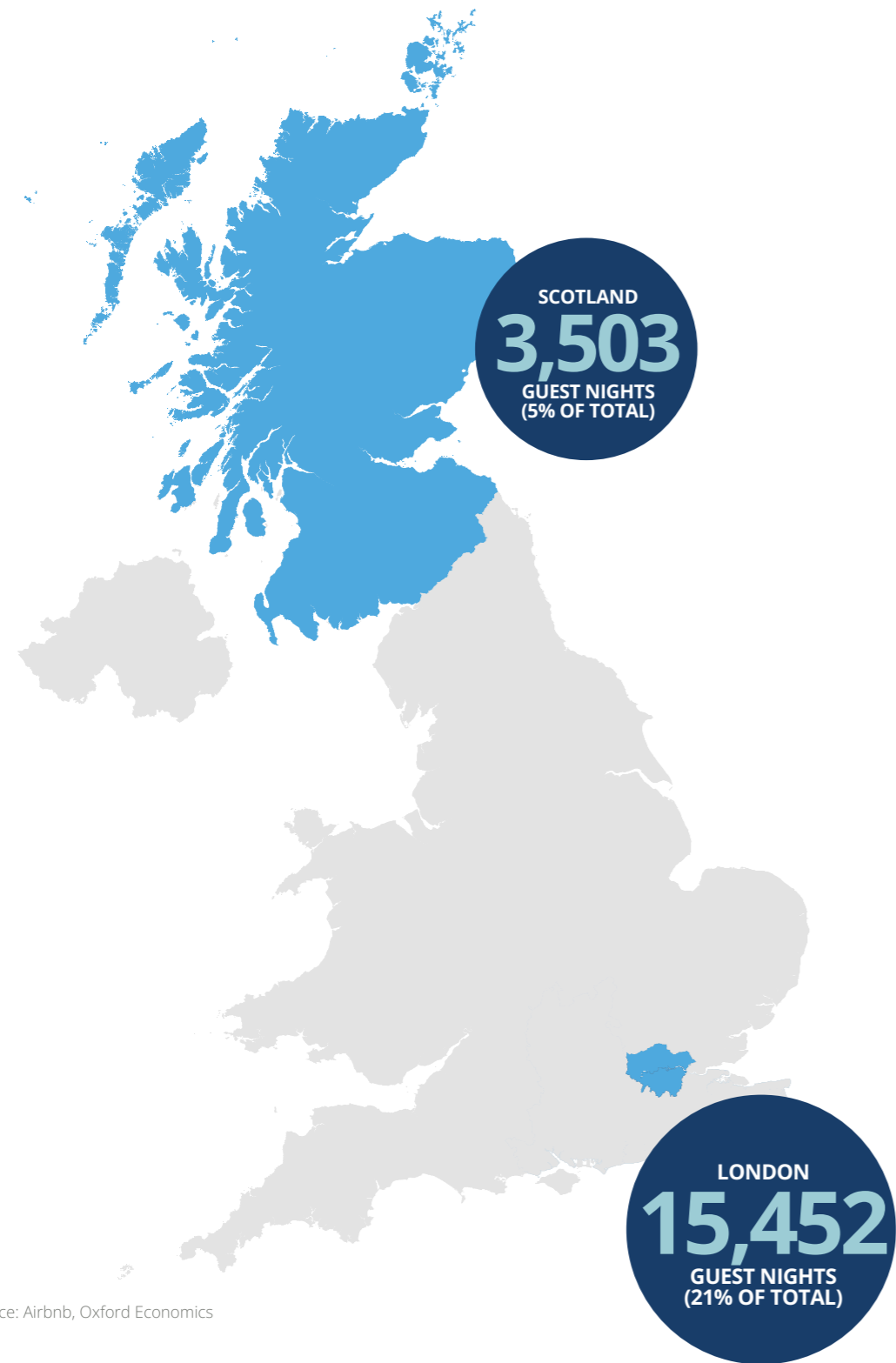
Source: Airbnb, Oxford Economics

¹⁵ The World Health Organisation, "What has COP26 achieved for health?", November 2021.

¹⁶ The geographical area, defined as Glasgow, which was considered for the COP26 Conference contains the following local authorities: Glasgow City, East Dunbartonshire, East Renfrewshire, North Lanarkshire, Renfrewshire, South Lanarkshire, and West Dunbartonshire.

Visitors from London were an important segment accounting for over half of domestic guest nights and 21% of all guest nights. The next most common UK origin region was Scotland accounting for 5% of all guest nights.

Fig. 13. Visitors to Glasgow during COP26, by origin area (domestic)

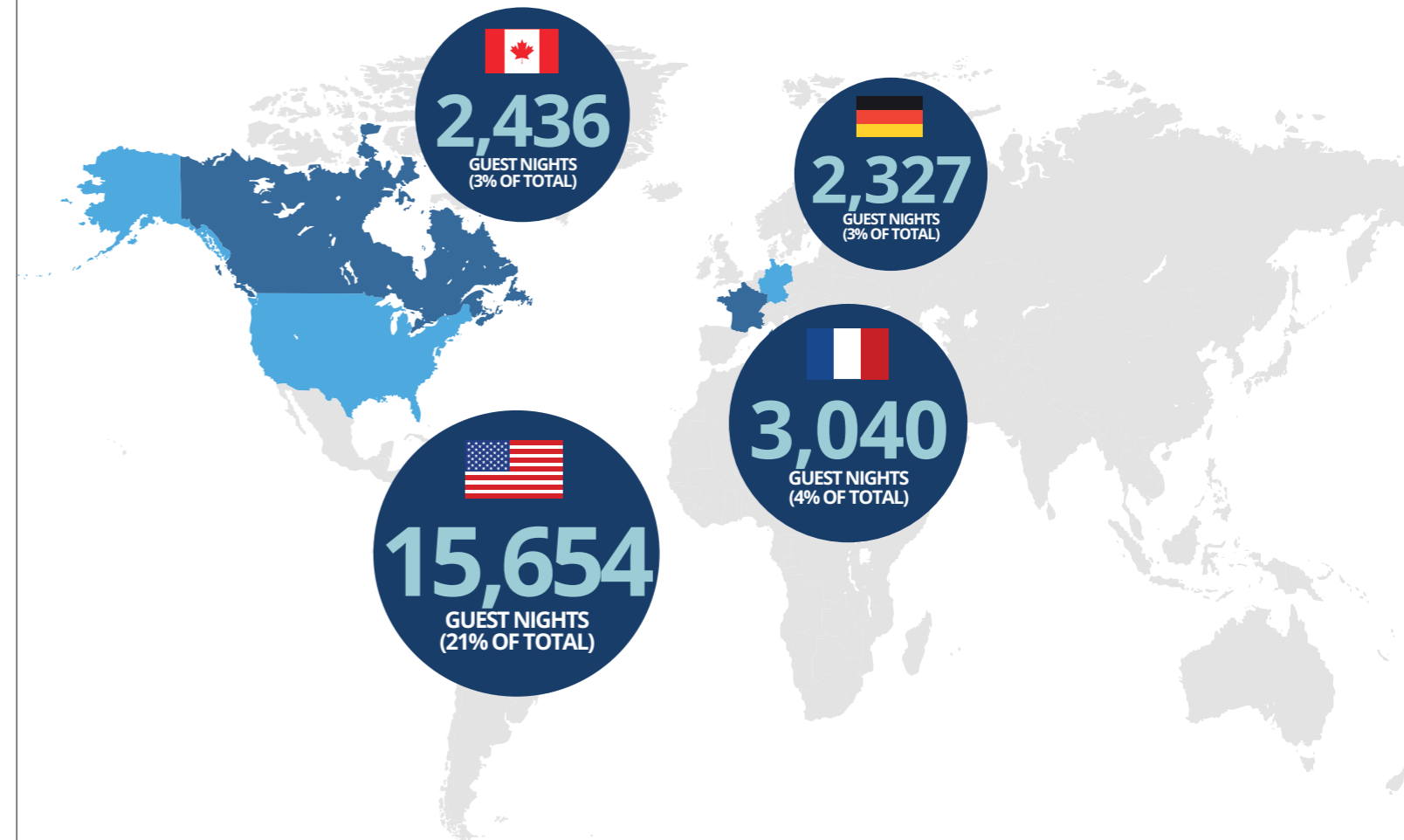


Source: Airbnb, Oxford Economics

There was significant booking demand on Airbnb amongst guests from the United States. They accounted for 17% of all guests using the platform in the area during the event and just over 20% of all guest nights. Visitors from France, Canada, and Germany were also particularly prominent, accounting for 4%, 3%, and 3% of total guest nights, respectively.

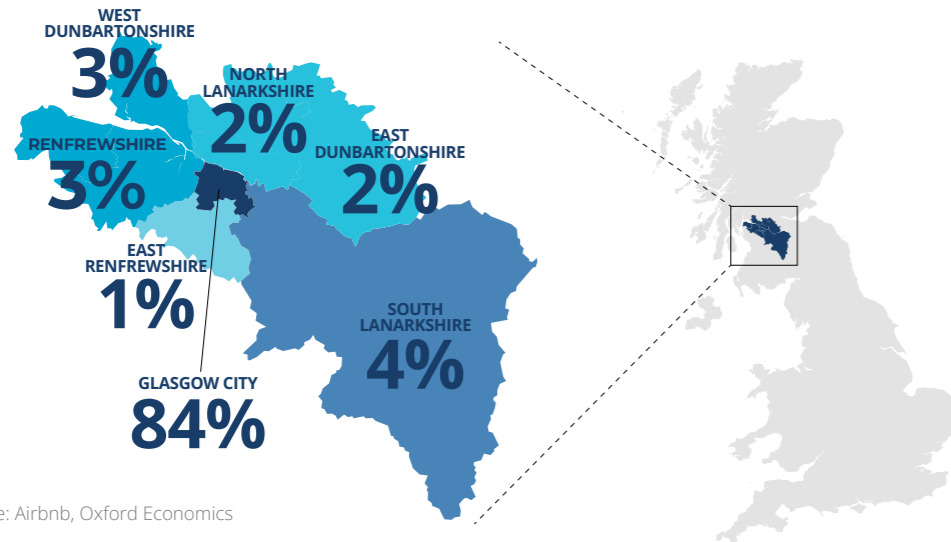
COP26 generated strong accommodation demand beyond the Glasgow City local authority area. The conference was held at the Scottish Event Campus (SEC) near Glasgow city centre, but close to 16% of guest nights were accommodated in East Dunbartonshire, West Dunbartonshire, North Lanarkshire, South Lanarkshire and East Renfrewshire. Listings on Airbnb helped provide visiting delegates with extra choice during a period of particularly strong demand for accommodation in the city centre.

Fig. 14. Visitors to Glasgow during COP26, by origin area (international)



Source: Airbnb, Oxford Economics

Fig. 15. Accommodation in Glasgow during COP26 (% guest distribution)



Source: Airbnb, Oxford Economics

The supply offered on Airbnb contributes to easing the pressure on accommodation infrastructure

A major benefit of the Airbnb platform is the flexibility it enables Hosts to provide accommodation at different times of the year. This flexibility enables destinations to expand their offering for visitors as Hosts can provide additional accommodation during periods of strong demand. Airbnb data indicates that listings on the platform in Glasgow grew faster by 73pp in the three months leading up to the event (August to November) in 2021, compared to the same period in 2019, before the COVID-19 pandemic disrupted travel. The rate of increase in listings leading up to COP26 was likely influenced by tourism recovery due to the easing of restrictions to contain the COVID-19 pandemic as well as increased demand as a result of COP26.

The impact of the flexibility enabled by Airbnb in meeting additional event-related demand is particularly apparent in the growth of private room listings during the months leading up to the event. Private room listings growth was 113pp higher leading up to COP26, between August and November 2021 compared to the same period in 2019. Our analysis indicates that without the listings on Airbnb, Glasgow would have required 19,000 additional hotel rooms to adequately accommodate all guests when demand was at its peak during COP26.¹⁷

Airbnb data shows that ahead of COP26, 94% of the increase in listings in Glasgow was attributable to casual home sharers, that is Hosts who let out their properties or private rooms for less than 90 days over the following year. This highlights the importance of flexibility on Airbnb to accommodate demand during the event.

Our analysis has identified that listings offered on Airbnb impacted the accommodation marketplace by reducing average room rates by almost £32 per night in Glasgow. This implies that without the accommodation provided by Hosts on Airbnb during the COP26 period, guests across Glasgow would have paid an extra 13% per night for their accommodation during the event.

The pricing pressures and choice enabled by supply on Airbnb during the event generated greater satisfaction and engagement with the conference, enhancing Glasgow's important role as host destination. Overall, we estimate this additional value, known as consumer surplus, that consumers derived due to Airbnb's role absorbing additional demand in Glasgow from COP26 at £5.8 million. This includes both the economic impact of reduced accommodation costs and increased satisfaction generated due to lower priced accommodation available. Our analysis indicates that the reduced costs made the event more accessible and encouraged an estimated 2,900 delegates to visit the region during COP26.

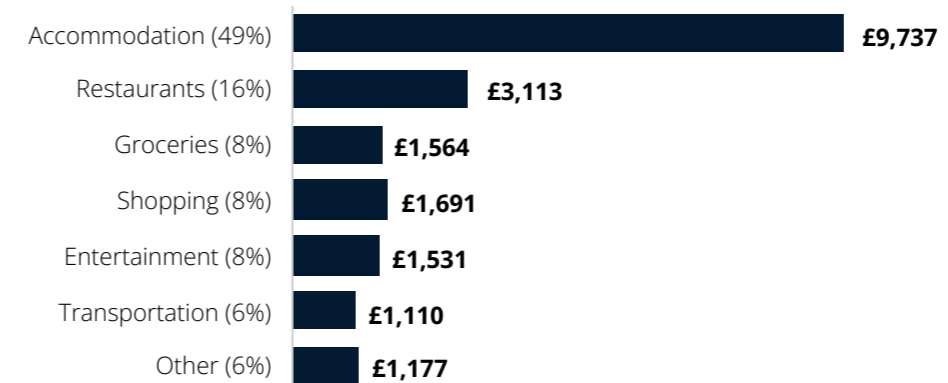
¹⁷ The estimates assume an average of 1.5 guests per hotel room booking, which is in line with previous estimates of 1.5 to 2 rooms per booking based on previous work by Oxford Economics on average room occupancy. The equivalent hotel room estimate highlights the importance of flexibility on Airbnb during events, and should be treated as indicative.



Guests on Airbnb made a significant contribution to the local economy

The overall expenditure of guests on Airbnb in Glasgow during COP26 is estimated to be around £19.9 million. This includes spend on accommodation with local hosts as well as spend on goods and services while staying in the area, including eating and drinking and shopping activities. Accommodation accounted for the largest share of overall expenditure (49%), followed by eating and drinking (16%). Emphasising the important role of guests on Airbnb on the visitor economy during the event overall spend by guests on Airbnb on non-accommodation items was nearly £10 million.

Fig. 16. Spending by guests on Airbnb during COP26 (% share of total, £ '000s)

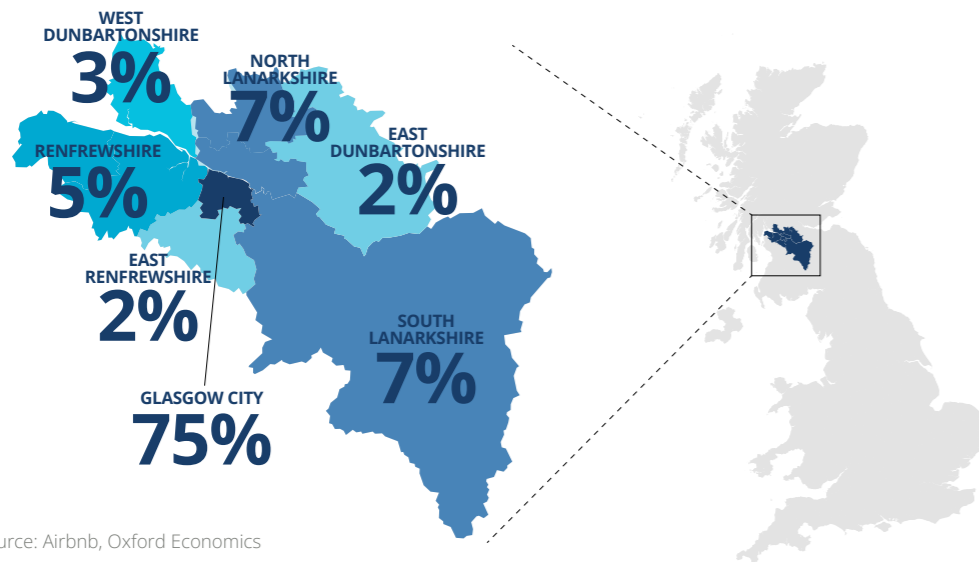


Source: Airbnb, Oxford Economics

The host local authority area, Glasgow City, benefited most from the economic benefits of Airbnb-linked expenditure during the period. Overall expenditure linked to Airbnb activity in the area was over £17 million of which more than £8 million was spent on non-accommodation items.

The overall GDP contribution of Airbnb-linked spend in Glasgow during the two-week period of the conference was around £23.7 million. This includes direct, indirect, and induced effects as guests on Airbnb spent money directly with local businesses which generated additional economic impacts for the economy. Airbnb activity generated around £18 million to GDP in Glasgow City with the remaining £6 million GDP contribution spread across the surrounding six local authorities.

Fig. 17. Distribution of GDP contribution by local authority area through spending by guests on Airbnb during COP26 (% of GDP contribution)



Source: Airbnb, Oxford Economics

Over 60% of the GDP contribution associated with stays booked on Airbnb was generated by international visitors. This represented over £14 million to GDP. This was due to international visitors tending to stay longer in the area and spend more on a nightly basis. These findings highlight that Airbnb provides an important function in enabling destinations to cater for the needs of international visitors which enables economic benefits for the UK economy.

The employment impact of Airbnb-linked expenditure in Glasgow during COP26 equated to supporting around 280 jobs in a year. Over 52% of the jobs supported were generated by direct expenditure as this helped to support around 150 jobs for one year (full-time equivalent, or FTEs).

In Glasgow City local authority, Airbnb-linked spend supported around 190 jobs for one year. The spend by guests on Airbnb in surrounding local authorities helped to support or create over 90 FTE jobs with the greatest impact in South Lanarkshire and North Lanarkshire (both around 25 FTE jobs).

In addition to supporting jobs, Airbnb-linked expenditure associated with COP26 generated total wages of over £17 million which led to tax revenues of around £4.9 million. Reflecting the significant economic impact of guests on Airbnb on the local economy, most of the wages and tax revenue were generated through direct channels. This meant that the direct impact through expenditure by guests on Airbnb contributed nearly £12 million to wages and over £2.6 million to tax revenues.

ECONOMIC IMPACT SUPPORTED BY GUESTS ON AIRBNB - COP26



£19.9m

Spending by guests in Airbnb on accommodation during the event



£23.7m

GDP contribution through spending by guests on Airbnb during the event



280

Jobs (full-time equivalents) supported through spending by guests on Airbnb during the event



£4.9m

Tax revenues through economic activity stimulated through spending by guests on Airbnb during the event



Technical Annex

How we measure the impact on supply

We estimate Airbnb's contribution to supply using data provided by Airbnb, for accommodation provided through the Airbnb platform, along with data from Smith Travel Research (STR), a hotel performance data provider, to understand hotel bookings. Airbnb data allows us to estimate the increase in listings in the months leading up to the event. For all events, we use a three-month window leading up to the event, and compare the increase in listings with growth in the corresponding months in 2019.

To illustrate the importance of Airbnb in alleviating the stress on infrastructure, we calculated the number of hotel rooms needed to accommodate all Airbnb guests. The estimates are based on Airbnb data on guest numbers on Airbnb when demand was at its highest during the event. The data was adjusted to account for differences in guest occupancy in hotels and listings on Airbnb.

Note that our analysis is based on data on guests and listings during the event, which may include the impacts associated with guests travelling for reasons not related to the event. In particular, note that COP26 took place in 2021 and therefore the findings are likely to include the impacts of the pandemic and the subsequent easing of restrictions.

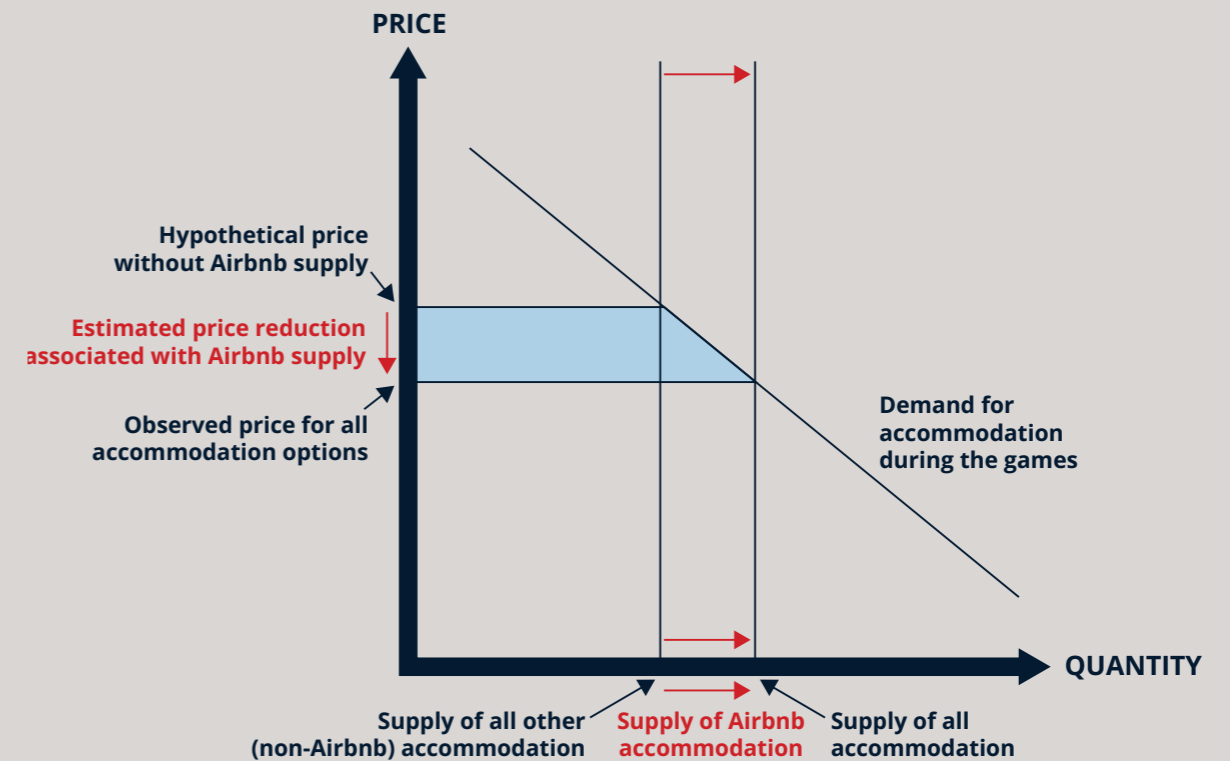
Estimating the price, demand, and consumer surplus impact of supply enabled by Airbnb

The price impacts are based on the supply available during the event, i.e., a comparison of all supply on Airbnb with that of hotels, the major alternative form of accommodation available to consumers during these events. We estimate the impact on prices, in percentage terms, by combining the price elasticity of demand for accommodation with the number of listings on Airbnb during the corresponding event. The share of accommodation supply is estimated using Airbnb data (for Airbnb accommodation) and STR data (for hotel accommodation). The price elasticity of demand is based on the median of estimates from the literature reviewed for this study.^{18, 19, 20} The estimated percentage impact on prices is then applied to the average room rates in the region during the event, sourced from Airbnb and STR. The price impacts do not include taxes but may include additional fees, such as breakfast costs, charged by the hotels.

The consumer surplus, therefore, is based on the price savings made available to guests on Airbnb and the estimated number of guests in the hotels staying with the corresponding segments during the event. The figure below illustrates our approach within the conceptual demand-supply framework. The Airbnb platform enables the supply curve, assumed to be vertical, to the right, which in turn, helps reduce prices. The Consumer Surplus is therefore calculated as the blue-shaded area below the demand curve.

As highlighted previously, our analysis is based on data on guests and listings during the event, which may include the impacts associated with guests travelling for reasons not related to the event.

Fig. 18. Consumer Surplus Framework (Illustrative)



Source: Airbnb, Oxford Economics

What is Airbnb-linked spending?

To understand the channels through which Airbnb contributes to the local economy, our starting point is the spending that takes place in the travel destination. Airbnb is an online marketplace platform that enables Hosts, who offer places to stay and things to do, to connect with tourists and travellers. From the perspective of a local economy, Airbnb acts as a portal, attracting tourists with spending power to a local area, who then go on to stimulate economic activity in that area, by booking stays with locals and purchasing goods and services during their visit.

Guest spending includes:

- Accommodation spending: Based on Airbnb data, we quantified the total expenditure on accommodation made by guests booking on Airbnb in the event-hosting regions in each year of the study.
- Ancillary tourism spending: In addition to rental expenditure, Guests on Airbnb typically spend money to arrive at their destination, and then (for example) to get around the host city or region, to dine out and entertain themselves, and to go shopping and engage in other tourism activities. We leveraged detailed Airbnb data on guest activity and overall visitor data from our in-house databases to quantify this annual spending, and its distribution across different industries.

¹⁸ European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, "The impact of taxes on the competitiveness of European tourism – Final report", Publications Office, 2017.

¹⁹ The Welsh Government, "Evidence review of elasticities relevant to a visitor levy in Wales", Social Research No. 60/2022, 20 September 2022.

²⁰ Chen, Jason Li, Gang Li, Anyu Liu, and NIGEL J. MORGAN. Review of Evidence of Elasticities Relevant to Tourism in Scotland. The Scottish Government, 2021.

Calculating the total economic impact of Airbnb

Economic impact involves quantifying the total expenditure made by guests on Airbnb in the destination economy and estimating three types of economic activity it stimulates.

- **Direct impact** relates to the value added from guest activity including: (1) Hosts on Airbnb and other businesses in facilitating stays of guests on Airbnb; and (2) tourism businesses facilitating other spending by guests within the destination, including on food & beverage, retail etc.
- **Indirect impact** is the economic activity and employment stimulated along the supply chain that supports those front-line businesses.
- **Induced impact** comprises the wider economic benefits that arise from the payments of wages to the employees of businesses serving guests on Airbnb, and other businesses in their supply chain. It also includes the share of the income of Hosts on Airbnb that is spent in the local economy. In our analysis, we also include the economic activity stimulated in the supply chains of these retail, leisure and other outlets.

The sum of these channels captures the spending identified in the previous step, from guests on Airbnb, and amounts to the total economic impact of Airbnb. The results are presented on a gross basis. They therefore ignore any displacement of activity from Airbnb's competitors as well as what the second most productive use of those resources would have been. Airbnb's economic contribution is measured using two metrics:

- **Gross value added (GVA)** contribution to GDP, defined as the value of the output produced, minus the expenditure on inputs of bought-in goods and services used up in the production of that output.
- **Employment** measured on a headcount basis in terms of jobs supported over a full year, i.e., full-time equivalents.

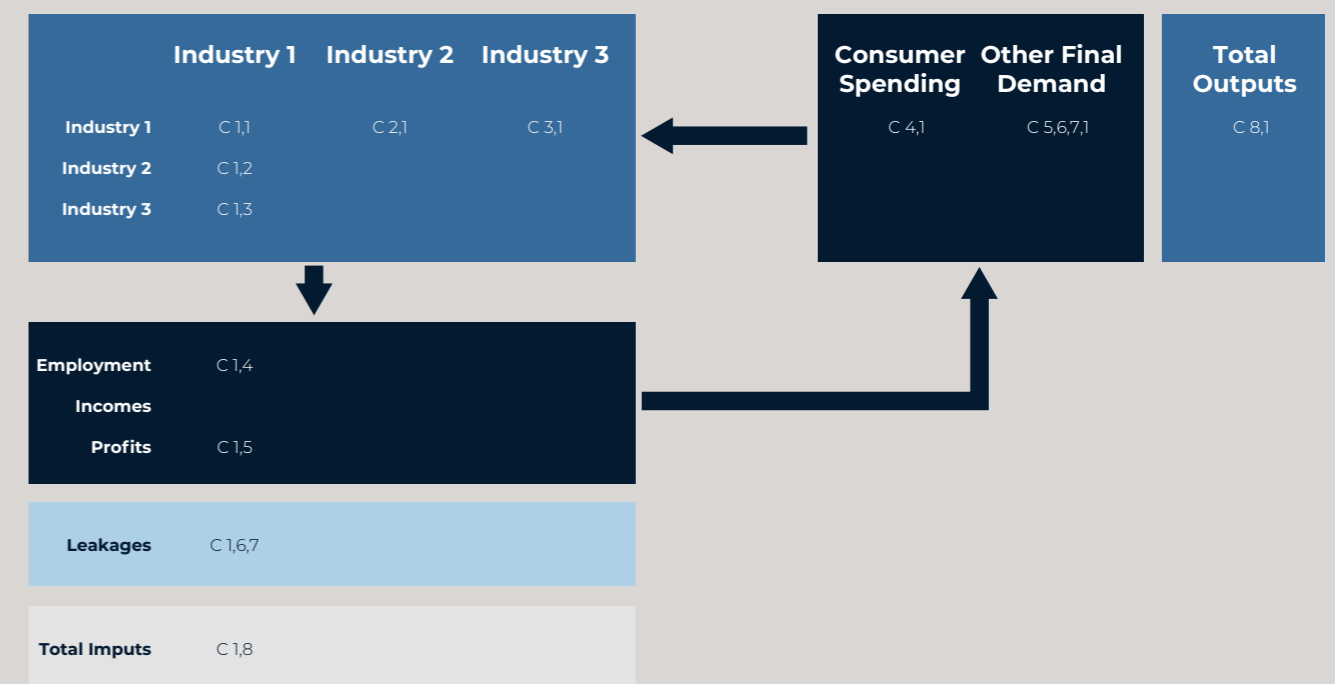
Overview of input-output modelling approach

Indirect and induced impacts are estimated using an "input-output" model. This type of model sets out the goods and services that industries purchase from one another in order to produce their output (as well as their purchases from abroad). These tables also provide detail on the spending patterns of UK households, and indicate whether this demand is met by UK production, or imported products. In essence, the tables show who buys what from whom. The diagram below demonstrates a stylised input-output model.

Using details of these linkages from Supply and Use tables, Oxford Economics constructed a bespoke UK regional impact model, which traces the intermediate consumption impact, and capital good consumption impact, attributable to Airbnb-linked visitor activity (this is known as the Leontief manipulation). This impact model quantifies all rounds of subsequent purchases along the supply chain. These transactions are translated into GDP contributions, using region-specific ratios of gross value added (GVA) to gross output, sourced from the regional UK input-output tables. Once we have obtained results for output and GVA, we estimate employment using productivity estimates. The calculation of the induced impacts is a discrete element of the model and incorporates the impact of Airbnb visitor spending on purchases, labour costs and final household consumption.

Indirect and induced impacts at the regional and county level were estimated using regional input-output models developed by Oxford Economics. These input-output models work in the same way as the national-level input-output model described above. However, they also incorporate inter-regional trade flows, which were estimated using regional national account data from the ONS.

Fig. 19. A simplified input-output model



Source: Airbnb, Oxford Economics

About the Research Team



Oxford Economics was founded in 1981 as a commercial venture with Oxford University's business college to provide economic forecasting and modelling to UK companies and financial institutions expanding abroad. Since then, we have become one of the world's foremost independent global advisory firms, providing reports, forecasts and analytical tools on more than 200 countries, 100 industrial sectors, and 8,000 cities and regions. Our best-in-class global economic and industry models and analytical tools give us an unparalleled ability to forecast external market trends and assess their economic, social and business impact.

Headquartered in Oxford, England, with regional centres in New York, London, Frankfurt, and Singapore, Oxford Economics has offices across the globe in Belfast, Boston, Cape Town, Chicago, Dubai, Dublin, Hong Kong, Los Angeles, Mexico City, Milan, Paris, Philadelphia, Stockholm, Sydney, Tokyo, and Toronto. We employ 450 full-time staff, including more than 300 professional economists, industry experts and business editors—one of the largest teams of macroeconomists and thought leadership specialists. Our global team is highly skilled in a full range of research techniques and thought leadership capabilities, from econometric modelling, scenario framing, and economic impact analysis to market surveys, case studies, expert panels, and web analytics.

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