Deloitte.



Economic contribution of Sydney Airport 2023

Sydney Airport

July 2024

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Glossary

Acronym	Full name
ABS	Australian Bureau of Statistics
ASIC	Aviation Security Identification Card
Airport	Sydney Airport
BITRE	Bureau of Infrastructure and Transport Research Economics
FTE	Full time equivalent
GDP	Gross Domestic Product
GOS	Gross Operating Surplus
GSP	Gross State Product
IO	Input Output
IVS	International Visitor Survey
NSW	New South Wales
NVS	National Visitor Survey
SA2	Statistical Area Level 2
TRA	Tourism Research Australia

Executive summary

Sydney Airport is a cornerstone of Australia's commercial aviation industry: in 2023, it hosted more than 38.6 million passenger movements – 26% of the nation's total and facilitated the export of 134,000 tonnes of airfreight.

The aviation sector, however, has been heavily impacted by the COVID-19 pandemic due to travel restrictions and border closures. In 2020, total passengers travelling through Sydney Airport were at 25% of 2019 levels. Freight meanwhile was more resilient and remained at 91% of volume in 2020.

Passenger volumes have since rebounded to 87% of pre-pandemic levels, however recovery of key international markets is still underway. While the total value of freight exports in 2023 was above pre-pandemic levels (at 126% compared to 2019) underpinned by a period of high inflation and a shift to higher value export commodities, in volume terms freight export activity remains below trend (89% of pre-pandemic levels).

Despite these challenges, the contribution of Sydney Airport to both the national economy and the New South Wales (NSW) economy remains significant.

Total contribution of Sydney Airport

In 2023, the total economic activity supported or facilitated by Sydney Airport contributed **$39.8 billion in value added** to the Australian economy, with associated employment of **314,600 full time equivalent (FTE) jobs**; representing 1.5% of Australia's Gross Domestic Product (GDP) and 3.0% of national FTE employment.

The economic contribution of Sydney Airport captures the economic activity of Sydney Airport's core operations and that of businesses operating within the Sydney Airport precinct along with the value associated with facilitated tourism and freight.

The economic contribution of each of the four components is summarised below, and in Table i which follows:

Economic contribution from operations and precinct businesses:

- Sydney Airport core operations and precinct activity directly contributed an estimated **$6.3 billion in value added** to the economy. When considering the indirect activity of suppliers, the total contribution from Sydney Airport core operations and business precinct was **$12.8 billion in value added and 76,400 full-time equivalent jobs.**
- The onsite operating activities of Sydney Airport and businesses resulted in 32,200 direct FTE jobs within the Sydney Airport precinct itself; representing 1.0% of total NSW employment**.**
- The 2023 core operations and precinct economic contribution results represent a 16% and 40% increase in total value added and employment, respectively, against 2019 levels.[1]

Economic contribution from facilitated tourism and trade activity:

- The international visitors facilitated by Sydney Airport spent an attributable **107 million nights** in Australia with an associated spend of **$12.2 billion** in 2023. A further **17.8 million visitor nights** and **$4.2 billion in spend was associated with Sydney Airport facilitated domestic visitation**. This tourism activity contributed an estimated **$8.1 billion in direct value added and 89,000 FTE jobs**.

[1] Refer to Section 2.5 and Appendix A for further details on interpreting the key drivers behind movements in economic contribution since 2019 and 2017.

Combined with the upstream activity, it is estimated that tourism facilitated by Sydney Airport contributed **$15.6 billion to national value added and supported 142,400 FTE jobs.**

- In 2023, Sydney Airport facilitated over **$20.2 billion in freight export revenue**. This contributed an estimated **$7.0 billion in direct value added** to the economy, with the purchase of inputs required to manufacture these exports resulting in a further **$4.4 billion in indirect value added** embedded in the supply chains. Overall, freight facilitated by Sydney Airport contributed a total of **$11.4 billion in value added** and supported a total of **95,800 FTE jobs.**
- The 2023 facilitated tourism and freight economic contribution results represent a 12% and 15% fall in total value added and employment, respectively, against 2019 levels; reflecting that aviation activity is still recovering compared to pre-pandemic levels.

Table i: Economic contribution of Sydney Airport to the national economy, 2023

Metric	Direct	Indirect	Total
Core and precinct business operations			
Value added ($b)	$6.3	$6.5	$12.8
Employment (FTE)	32,200	44,200	76,400
Facilitated tourism			
Value added ($b)	$8.1	$7.5	$15.6
Employment (FTE)	89,000	53,400	142,400
Facilitated freight			
Value added ($b)	$7.0	$4.4	$11.4
Employment (FTE)	59,200	36,600	95,800
Total			
Value added ($b)	$21.5	$18.3	$39.8
Employment (FTE)	180,400	134,200	314,600

Source: Deloitte Access Economics

Economic contribution per typical international services

A total of 14.6 million international passenger movements and 134,300 tonnes of freight exports were facilitated by Sydney Airport in 2023. By combining this facilitated activity with estimates of Sydney Airport's core operations and precinct economic contribution, it is possible to estimate the 2023 contribution of a typical daily service[2]:

- A typical daily international service contributed $172 million in value added and supported an estimated 1,100 FTE jobs in Australia in 2023.
- Comparatively, an Airbus A380 daily service from Singapore, a higher yielding source market with higher load factors, contributed $328.6 million in value added and supported an estimated 2,100 FTE jobs in 2023 while a daily service on the same aircraft from the United Kingdom contributed $261.5 million in value added and supported an estimated 1,700 FTE jobs in 2023.

Supporting almost $40 billion in value added and an estimated 314,600 FTE jobs across Australia, Sydney Airport's contribution to the national economy is significant, with the Airport continuing to play an active role in supporting the ongoing economic recovery. A large proportion of this contribution occurs directly on the Airport precinct itself, both related to Sydney Airport's operations and across the 700+ businesses that operate on the precinct. As a major gateway to Australia, Sydney Airport also plays a crucial role in facilitating tourism and freight exports throughout the state and nation.

[2] Estimates of per flight economic contribution reflect what a typical daily international service contributed to the economy at a particular point in time (in this case, in 2023) based on key modelling parameters and assumptions. These estimates do not represent how much value added would be gained or lost if these flights did or did not occur.

1 Introduction

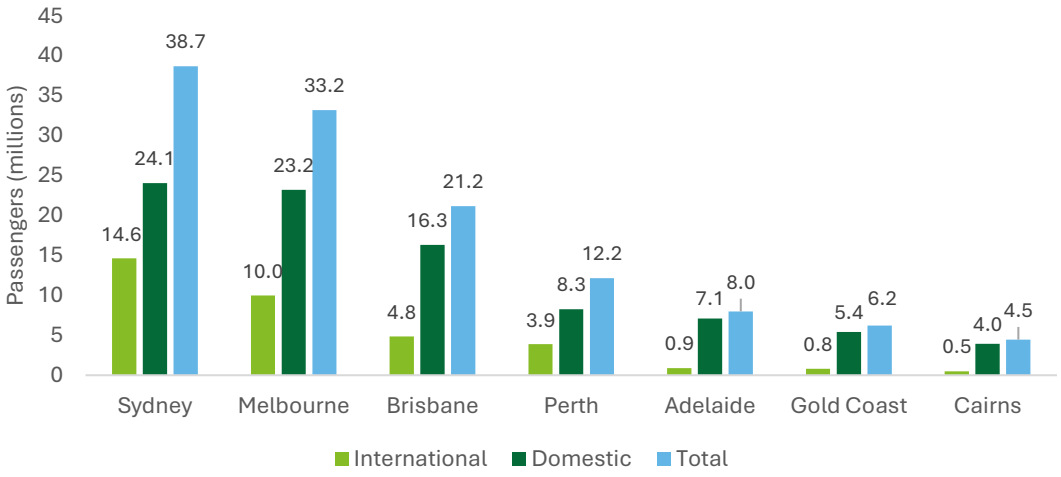
This report presents estimates of the economic contribution of Sydney Airport (the Airport) to the Australian economy, for the 2023 calendar year. The study is an update to the 2019 Deloitte Access Economics economic analysis for Sydney Airport. The report will be used to inform communications with a range of stakeholders and will contribute to the upcoming Sydney Airport Master Plan 2045.

1.1 The economic role of Sydney Airport

Sydney Airport is central to not only to Australia's commercial aviation industry, but also to the country's overall economic prosperity. The Airport plays a strategic role in connecting individuals, facilitating trade activity and providing services. Fundamentally, the role of the Airport captures the operational 'core', which comprises the central operation of the Airport facility, including its runway infrastructure, terminals and critical aviation safety and security. However, this core activity is a subset of the broader activity that occurs on the Airport precinct, including airline operations, retail and tourism services and landside transport and logistics.

The Airport is Australia's largest and busiest, moving more domestic and international passengers than any other airport in Australia, facilitating 41% and 27% of Australia's 2023 international and domestic passenger movements respectively (Chart 1.1).

Chart 1.1: Passenger movements at Australia's major airports, 2023



Source: BITRE aviation statistics

The economic activity supported by the Sydney Airport precinct

The most prominent on-airport operations are the domestic and international passenger airlines' activities including customer service, catering, baggage handling, maintenance, and refuelling. Yet the majority of businesses operating at Sydney Airport are not immediately involved in regular passenger transport aviation, including:

- onsite retail, such as newsagencies, clothing and duty-free stores
- precinct hospitality, including accommodation and on-site F&B options
- ground transport, including terminal shuttle buses and taxi services
- security and other government services, including customs, police and security contractors
- dedicated freight and logistics business; and
- other corporate/office-based businesses.

All these activities are captured in the contribution study as part of the Sydney Airport precinct – a consistent approach to prior studies.

Tourism and trade flows though the airport

In 2023, Sydney facilitated over 7.4 million arriving international passenger movements, around 44% of which were overseas visitors to Australia with the balance being Australian returning Australian residents. The expenditure of international visitors during their stay in Australia is an export for the Australian economy.

Sydney Airport also hosted 12.1 million inbound domestic passengers in 2023, of which 5.4 million were inbound domestic visitors. Facilitated domestic visitation, while not explicitly an export, forms part of the economic contribution of activity facilitated by Sydney Airport.

Overall, the international and domestic visitors facilitated by Sydney Airport spent an attributable $16.4 billion in 2023.

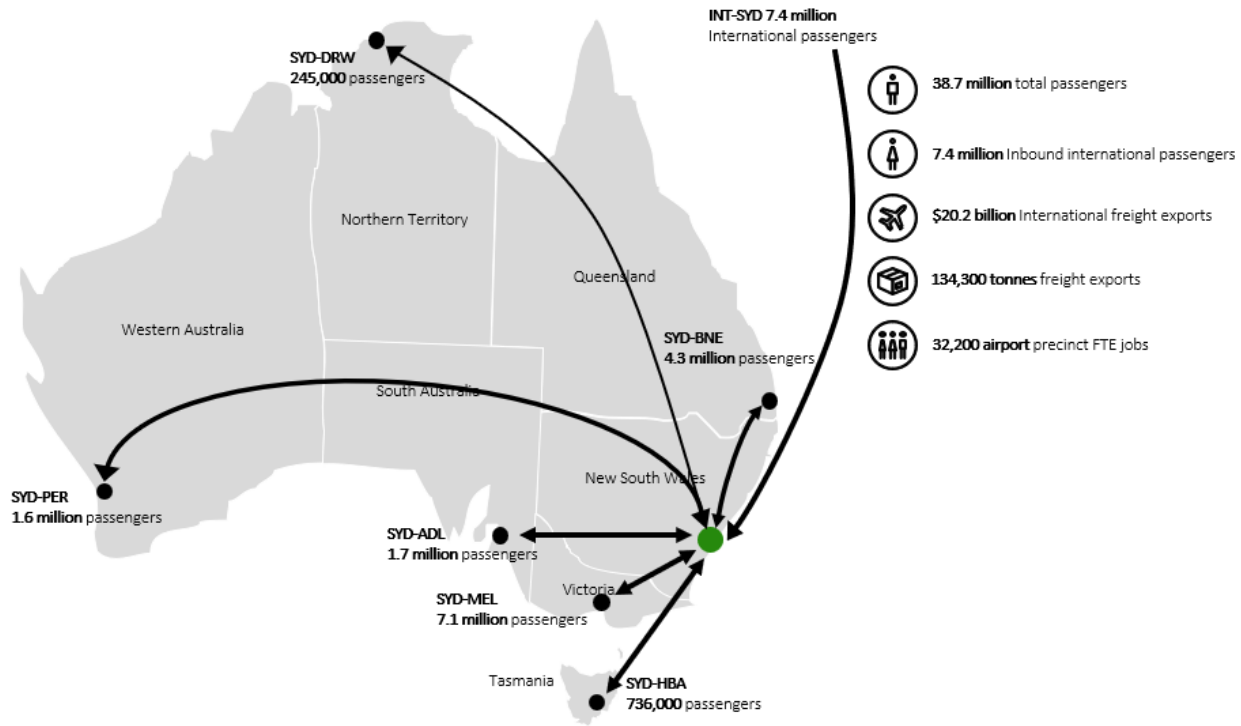
In addition to facilitating visitors, in 2023 Sydney Airport also facilitated the export of over 134,300 tonnes of goods, valued at $20.2 billion. While these export goods were generally not produced within the precinct, the Airport plays a critical role in facilitating the delivery of goods to overseas markets.

Facilitated visitor and freight exports through Sydney Airport are both captured in the contribution study as part of the Airport's activity, using a framework consistent with prior analyses.

Sydney Airport also facilitated 7.2 million outbound international passenger movements, 59% of which was short-term resident travel, and the import of 194,200 tonnes of goods valued at $53.7 billion. While not measured as part of this analysis, this significant volume of imports facilitated by Sydney Airport creates considerable consumer surplus for Australians. Some imported goods also serve as important intermediate inputs for production by Australian businesses.

An overview of the key tourism and trade flows facilitated by Sydney Airport in 2023 is shown in Figure 1.1.

Figure 1.1: Sydney Airport passengers, freight and employment, 2023



Source: Deloitte Access Economics

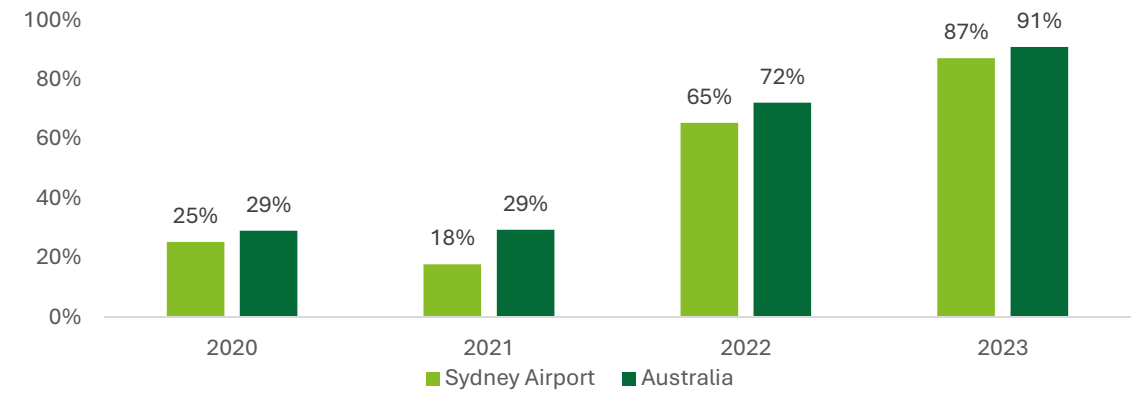
1.2 COVID-19 impact and recovery

Recovery in the aviation sector

Prior to the pandemic, the Airport saw steady growth in both passengers and aircraft movements, with average annual growth of 2.8% and 1.2% respectively in the five years to 2019.

The COVID-19 pandemic brought unprecedented disruption to global aviation, with its impact felt across the entire ecosystem, and Sydney Airport was no exception. With the implementation of movement restrictions in 2020, the aviation industry saw a sharp and immediate decline as total passenger movements dropped by 71% across Australia and 75% at Sydney Airport specifically (Chart 1.2). This severe decline saw airlines struggle, running few flights at significantly diminished load factors.

Chart 1.2: Recovery in passenger movements relative to 2019

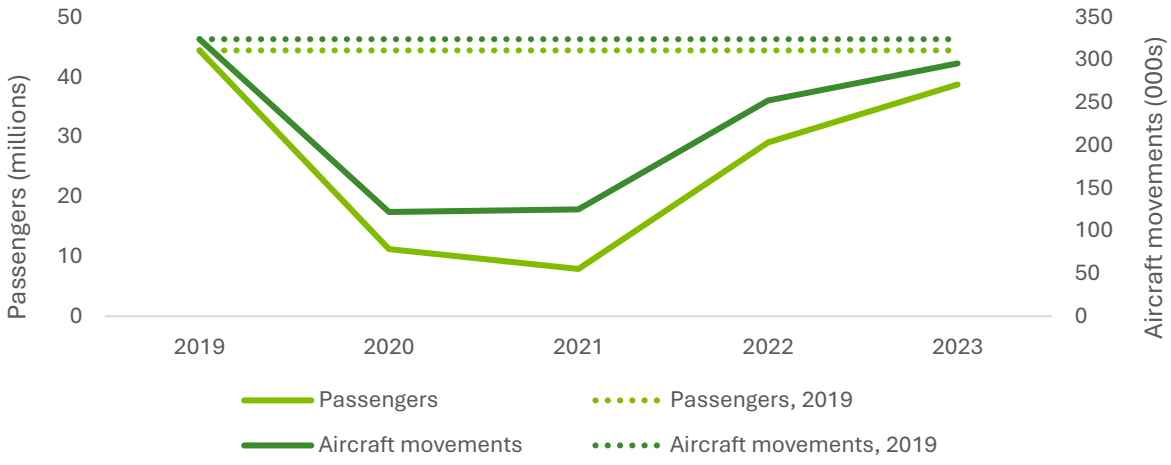


Source: BITRE aviation statistics

The easing of travel restrictions in 2021 and 2022 enabled the gradual resumption of air travel. As of July 2024, the aviation industry has largely recovered in terms of total passengers and aircraft movements (BITRE aviation statistics (2024)).

That said, the aviation sector was very much in recovery in calendar year 2023, the timeframe for this analysis, with total passenger movements across Australia at 91% of 2019 levels (Chart 1.2). Given the Airport's significant exposure to international travel, Sydney Airport passenger movements were at 87% of pre-pandemic levels in 2023, slightly below the national average. Aircraft movements through Sydney Airport have followed a similar trajectory to the recovery in passengers, finishing 2023 at 91% of 2019 levels; slightly higher than passengers, reflecting the slower recovery of international traffic demand, typically serviced by larger aircraft (Chart 1.3).

Chart 1.3: Sydney Airport total passenger and aircraft movements



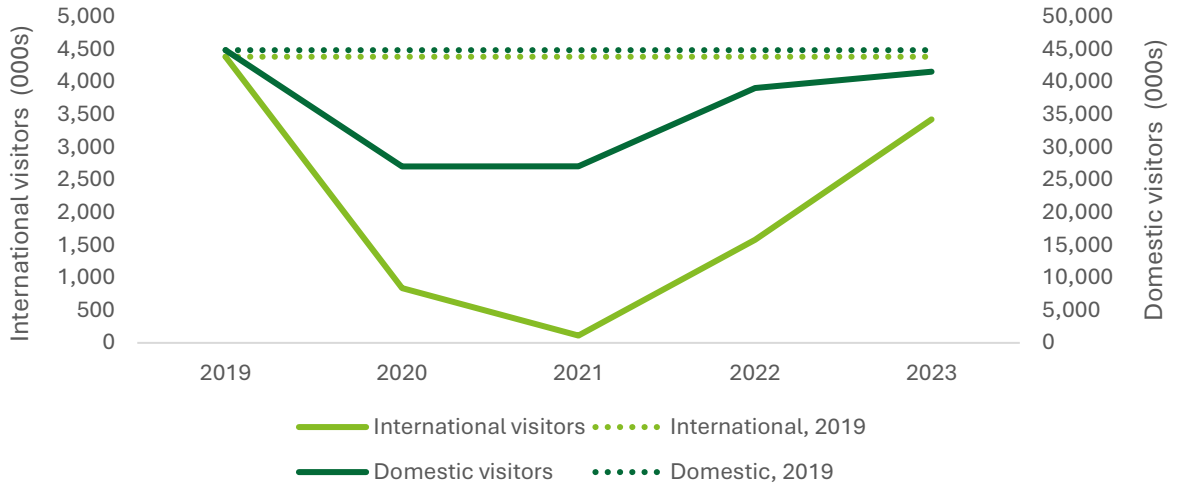
Source: BITRE aviation statistics

Given Airport precinct activity is significantly affected by the level of activity in the aviation sector, including the volume of passengers through the Airport, the ongoing recovery of the aviation sector has important implications for the estimated contribution of the precinct.

Tourism sector recovery

The tourism sector was also severely impacted by travel and movement restrictions, with the sector still in recovery throughout 2023. Domestic visitation to NSW, although quicker in its recovery than international travel, was still below pre-pandemic levels at 93% relative to 2019. Due to lagged international border re-openings, international visitation has seen a notably slower recovery with a total of 3.4 million international visitors to NSW in 2023, 78% of the 4.4 million in 2019 (Chart 1.4).

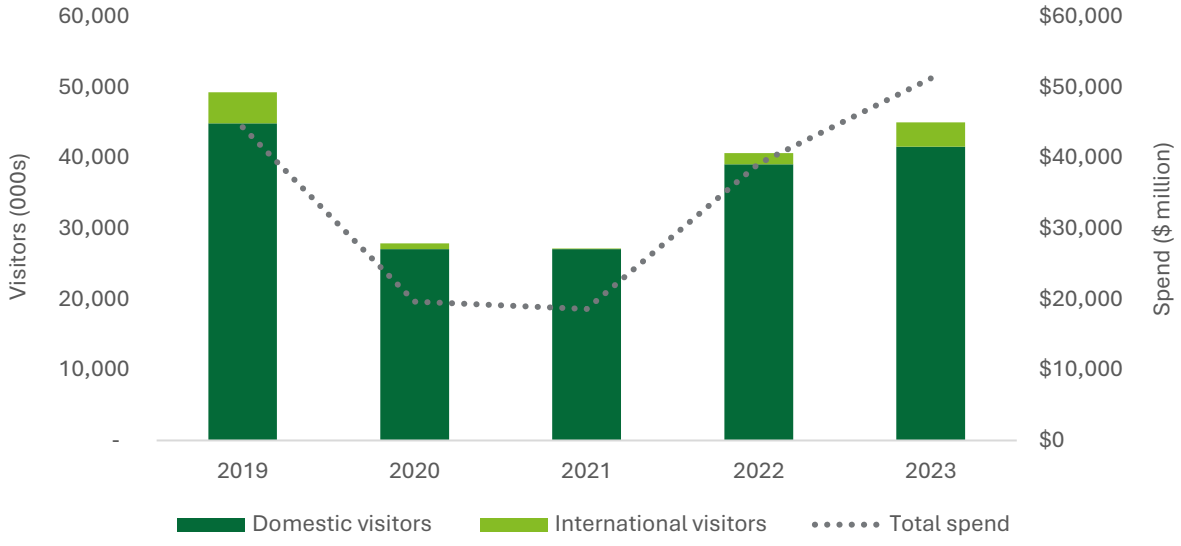
Chart 1.4: International and domestic visitors to New South Wales



Source: Tourism Research Australia

Although both domestic and international visitor volumes remain in recovery, the associated expenditure has recovered in nominal terms (Chart 1.5). Expenditure growth is partly explained by high inflation over the period, with higher prices resulting from supply constraints and broader macroeconomic conditions. However, new and improved product offerings, such as new hotel developments and quality improvements in food and beverage options, also drove spending increases.

Chart 1.5: International and domestic visitors and associated visitor spend in New South Wales



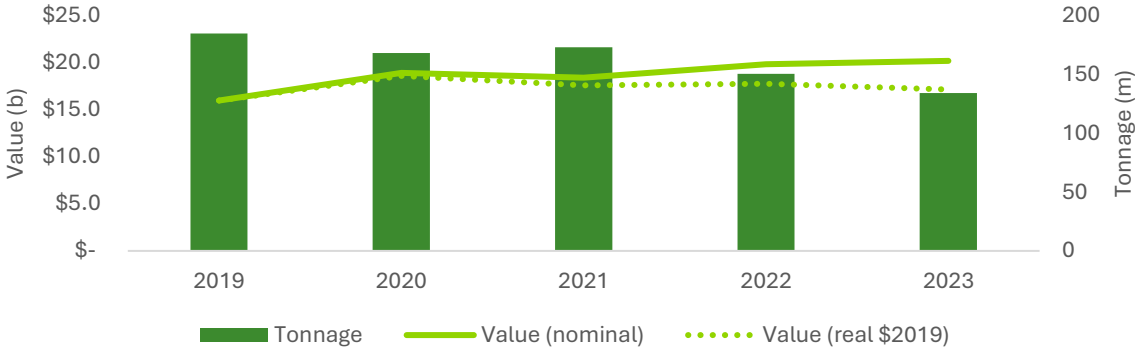
Source: Tourism Research Australia

The contribution of facilitated tourism is naturally closely tied to the passenger activity and in particular the expenditure of visitors Sydney Airport facilitates. The ongoing recovery, particularly in terms of international visitors therefore has implications for the contribution of facilitated tourism.

Recovery in the freight sector

Since 2019, there has been a moderate decline observed in the total volume of freight (tonnage) through Sydney Airport (Chart 1.6). However, the overall value of the freight increased over this same period, reflecting both the high inflation environment and a shift towards higher value commodity exports. For example, the volume of dairy, eggs, and honey, which are of relatively low value proportionate to weight, has decreased since 2019 while there has been an increase in the export of precious gems and metals, electrical parts as well as professional and scientific manufacturing, which are of relatively high value proportionate to weight.

Chart 1.6: Tonnage and value of international airfreight exported from Sydney Airport



Source: MariTrade

The total value of freight exported from Sydney Airport in 2023 directly feeds into economic contribution of facilitated freight estimates, with the shift in export commodity types also having implications in terms of profit margins, labour intensity, and supply chain effects.

1.3 Overview of approach to this study

Economic contribution studies provide a snapshot of the contribution of a firm or industry (in this case Sydney Airport) at a particular point in time. The analysis uses common financial measures such as revenue, wages and precinct employment to estimate the Airport's contribution to the Australian (and New South Wales) economies.

This approach is consistent with the framework used by the Australian Bureau of Statistics (ABS) in compiling the Australian National Accounts. In addition to the direct contribution associated with Airport and precinct operations, the demand for upstream inputs and further interlinkages with other sectors of the economy are modelled using ABS supply-use (or input-output) tables.

The economic contribution findings were estimated using a range of data sources, including:

- Sydney Airport internal profit and loss, and personnel data for the 2023 calendar year
- Sydney Airport data on passenger and airline traffic movements from in 2023, and forecasts to 2045
- Sydney Airport Aviation Security Identification Card (ASIC), leaseholder databases and airport access fee data
- ABS Input-Output tables and Tourism Satellite Account, 2021-22
- Aviation statistics and airfreight data from the Bureau of Infrastructure and Transport Research Economics (BITRE) and MariTrade from 2019 to 2023 calendar year; and
- National and international visitor survey data from Tourism Research Australia (TRA), year to December 2023.

The publicly available data was supplemented with a bespoke survey of precinct businesses. The survey was developed and scripted by Deloitte and distributed to all known email contacts related to ASIC holding or lease holding businesses at Sydney Airport precinct. ASIC and leaseholder precinct businesses databases were then merged with the business level data from the precinct business survey to estimate the employment profile of the precinct by industry. The contribution of Airport precinct

activity was estimated using FTE employment-based input-output multipliers; and is an important component of this analysis, providing a ground up rebasing of employment estimates.

TRA and BITRE data were used to inform measures of average spend per visitor across key domestic and international source markets, and specific aviation activity metrics including the share of travel and expenditure in Australia that is attributable to Sydney Airport. The resultant estimates of aggregate facilitated tourism expenditure of Sydney Airport in 2023 were applied to the Deloitte Tourism Contribution Model; a model that is used to measure the economic contribution of facilitated tourism based on an internationally recognised accounting framework.

BITRE, MariTrade and ABS data were used to inform export freight value, volume and commodity profile through Sydney Airport over time. This data was applied to Deloitte's' Regional Input-Output Model, underpinned by Australia's national accounting multipliers and trade matrices, to estimate the direct and indirect economic contribution of facilitated freight.

To estimate the projected economic contribution of Sydney Airport, different rates of aviation growth for the different components of airport activity are applied to the 2023 estimates. Projections also account for labour productivity improvements over time.

Further details on the data and methodology underpinning the analysis can be found in the following attached Appendices:

- Appendix B: Sydney Airport precinct business survey and estimating precinct related FTE employment
- Appendix C: Tourism contribution approach
- Appendix D: Facilitated tourism methodology
- Appendix E: Facilitated freight data

This report primarily focuses on the economic contribution to Australia, however, estimates of the contribution to NSW, which reflect expenditures and economic activity that occurs within the state economy, were also produced and are reported in Appendix F.

Appendix G contains the future economic contribution tables from 2023 up to 2045.

2 Economic contribution of Sydney Airport

Sydney Airport is a cornerstone of Australia's commercial aviation industry: in 2023 the Airport hosted more than 38.6 million passenger movements, 283,900 aircraft movements and 134,300 tonnes of airfreight. The economic contribution of a major piece of infrastructure such as Sydney Airport takes a variety of forms. In broad terms, these include the economic activity of enterprises operating on the Sydney Airport precinct and the economic activity supported by the tourism and trade flows the Airport facilitates.

In aggregate, Sydney Airport's core operations, precinct activity and facilitated tourism and freight supported **$21.5 billion in direct value added and 180,400 direct FTE jobs in 2023**. After considering the indirect supply chain activity, the total economic contribution of Sydney Airport to the national economy was **$39.8 billion in value added and 314,600 FTE jobs in 2023.**

Table 2.1: Economic contribution of Sydney Airport to the national economy, 2023

Metric	Direct	Indirect	Total
Core and precinct business operations			
Value added ($b)	$6.3	$6.5	$12.8
Employment (FTE)	32,200	44,200	76,400
Facilitated tourism			
Value added ($b)	$8.1	$7.5	$15.6
Employment (FTE)	89,000	53,400	142,400
Facilitated freight			
Value added ($b)	$7.0	$4.4	$11.4
Employment (FTE)	59,200	36,600	95,800
Total			
Value added ($b)	$21.5	$18.3	$39.8
Employment (FTE)	180,400	134,200	314,600

Source: Deloitte Access Economics

In 2023, the economic contribution of Sydney Airport and the economic activity it facilitated can be summarised as follows:

- Sydney Airport core operations and precinct activity directly contributed an estimated **$6.3 billion in value added** to the economy. When considering the indirect activity of suppliers, the total contribution from Sydney Airport core operations and business precinct was **$12.8 billion in value added and 76,400 full-time equivalent jobs.**
- Tourism activity facilitated by Sydney Airport contributed a total of **$8.1 billion in direct value added and 89,000 FTE jobs**. Combined with the upstream activity, it is estimated that tourism facilitated by Sydney Airport contributed **$15.6 billion to national value added and supported 142,400 FTE jobs.**
- Sydney Airport facilitation of freight exports contributed to **$7.0 billion in direct value added** to the economy, with the purchase of inputs required to manufacture these exports resulting in a further **$4.4 billion in indirect value added** embedded in the supply chains. Overall, freight facilitated by Sydney Airport contributed a total of **$11.4 billion in value added** and supported **95,800 FTE jobs.**

This report focusses on the economic contribution to the national economy. Refer to Appendix F for the results in terms of economic contribution to the NSW economy.

2.2 Economic contribution of Sydney Airport's core operations and business precinct

The day-to-day management of Sydney Airport itself generates significant economic activity through its operational profitability, employment requirements and expenditure on suppliers. However, Sydney Airport precinct hosts a far broader range of business activity to support and service passenger and airside requirements at the Airport.

In considering the contribution of the Sydney Airport precinct, it is first important to define the scope of precinct related activity beyond the core operational activity of Sydney Airport. Under the context of this analysis, precinct related activity is defined to include:

- Day-to-day management and operational activities of Sydney Airport
- All Aviation Security Identification Card (ASIC) holding businesses
- All lease holding businesses
- All accommodation businesses operating within the Sydney Airport and Mascot statistical areas which exist primarily to service people travelling through the Airport
- Taxis, car hires and buses which service passengers travelling through the Airport.

In 2023, Sydney Airport's core operations directly contributed **$1.5 billion in value added** to the national economy and supported **600 FTE jobs.** Combining this with the broader precinct business activity results in a direct contribution of **$6.3 billion in value added** and **32,200 FTE employees** associated with the array of business operations, including aviation-related enterprises as well as wider retail, commercial, Government and hospitality activity across the Sydney Airport precinct.

Table 2.2 provides a detailed breakdown of precinct employment by sector. As expected, the majority of workers in the precinct are employed in the Transport, Postal and Warehousing industry. Over 68% of direct employment is within this industry, which includes Sydney Airport operations, airlines, taxis, and transport support services.[3] The other major industries of employment are Retail Trade, Accommodation and Food Services and Public Administration and Safety.

Table 2.2: FTE employment associated with Sydney Airport precinct activity, 2023

Industry / employment category	2023	Share (%)
Transport, Postal and Warehousing[1]	22,000	68%
Retail Trade	1,900	6%
Accommodation and Food Services	1,400	5%
Public Administration and Safety	1,600	5%
Other	5,300	17%
Total	**32,200**	

Source: Sydney Airport provided data and business survey. Note: (1) includes direct employment of Sydney Airport

Through the purchase of inputs, precinct activity contributed to broader employment and economic activity in the Australian economy. For example, a food and beverage outlet will use wholesale food, electricity, and water in their food preparation process, plus technical services for their equipment maintenance, and financial services for bookkeeping. This upstream demand for goods and services contributes to jobs and growth in the broader national economy, resulting in an indirect contribution.

Through these supply chain effects, **core operational and precinct related activity** supported a further **$6.5 billion in indirect value added** and **44,200 FTE jobs**. The indirect component makes up 56% of the total contribution of precinct activity, reflecting the value of economic activity that the precinct helps support through its linkages with other sectors of the economy.

In total precinct related activity contributed **$12.8 billion value added** and **76,400 FTE jobs** to the national economy in 2023**.**

[3] More specifically, transport and storage covers all: road transport; rail transport; water, pipeline and other transport; air and space transport; postal and courier pick-up and delivery service; and transport support services and storage workers.

2.3 Economic contribution of facilitated tourism

Sydney Airport, as one of Australia's major international and domestic gateways, plays an important role in facilitating tourism in both NSW and Australia. Given Australia's size, the geographical dispersion of tourist destinations, and distance from major trading partners, Sydney Airport is critical in facilitating tourism.

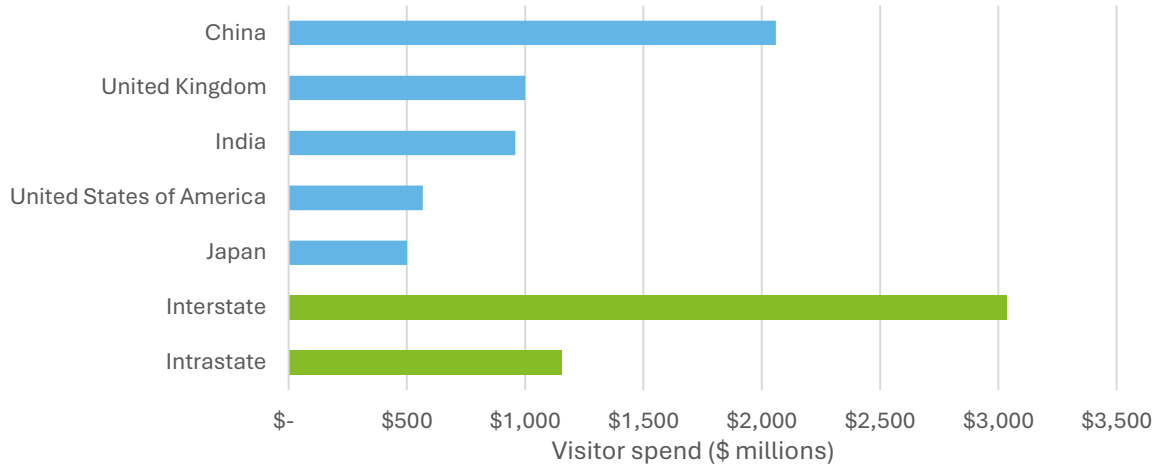
Facilitated tourism expenditure

Australia's tourism industry is heavily reliant on the aviation sector and, in particular, on Sydney Airport as an international and domestic gateway. An estimated 49% of Australia's 6.6 million international visitors in 2023 arrived via Sydney, with the number of international visitors to Australia still recovering, at 77% of pre-COVID levels.

International visitors arriving and/or departing from Sydney Airport spent around **107 million nights** in Australia in 2023. The average nightly spend by international visitors, excluding airfare, was $114 per night. When expenditure in other states and territories by visitors who used Sydney Airport at some point during their trip is taken into account, **international tourism expenditure facilitated by the airport in 2023 is estimated at $12.2 billion.**

Domestic visitors facilitated by Sydney Airport were estimated to spend a total of **17.8 million visitor nights** in 2023. With a modelled average nightly spend of $286, this yields an associated visitor spend of **$4.2 billion in 2023.**

Chart 2.1: Visitor spend of top 5 international source markets and domestic market, 2023



Source: Tourism Research Australia, Deloitte Access Economics

Economic contribution of facilitated tourism

Tourism activity facilitated by Sydney Airport contributed $**8.1 billion in direct value added** and supported **89,000 direct FTE jobs** in Australia. Combined with the indirect contribution to upstream suppliers, it is estimated that tourism facilitated by Sydney Airport contributed **$15.6 billion to national value added** and supported **142,400 FTE jobs**.

2.4 Economic contribution of facilitated freight

Sydney Airport is the largest airfreight port in Australia, accounting for over half of all airfreight value in Australia and acting as a major exporter of non-ferrous metals (precious gem and metal manufacturing), professional, scientific and controlling instruments, telecommunications equipment and edible products – along with a wide variety of other goods.

The international export of goods by airfreight generates revenue, value added and employment across Australia. In 2023, Sydney Airport facilitated over **$20.2 billion in export revenue**, equating to **134,300 tonnes of goods**. This contributed to **$7.0 billion in direct value added** to the economy. The purchase of inputs required to manufacture these exports, resulted in a further $**4.4 billion in indirect value added** embedded in the export supply chains. In total, facilitated freight contributed a total of **$11.4 billion in value added and 95,800 FTE jobs in 2023.**

2.5 Comparison of 2019 and 2023 economic contribution

The ongoing recovery of the aviation, tourism and freight sectors, alongside broader economic conditions such as high inflation, tightened profit margins, and supply constraints, have critical implications when considering the economic contribution of Sydney Airport in 2023 relative to the prior 2019 report.

Comparison of core operations and precinct activity contribution

A comparison of the economic contribution of core airport operations and precinct activity between 2023 and 2019 is shown in Table 2.3 below. The underlying drivers of change are distinct between Sydney Airport core operations and precinct business activity, and so, these implications are discussed separately below.

Table 2.3: Economic contribution of Sydney Airport's core operations and precinct activity, 2019 and 2023

Measure	2019	2023	Share of 2019 (%)
Direct value added ($b)	$6.5	$6.3	98%
Indirect value added ($b)	$4.5	$6.5	142%
Total value added ($b)	$11.0	$12.8	116%
Direct FTE employment	30,400	32,200	106%
Indirect FTE employment	24,200	44,200	183%
Total FTE employment	54,700	76,400	140%

Source: Deloitte Access Economics

The key drivers of change in the contribution of core airport operations between 2019 and 2023 are (refer to Table 2.4 for details):

- An **increase in direct employment and inflationary impacts on wage growth** driving a modest increase in direct value added due to increased labour expenses.
- The positive impact of growing labour expenses on direct value added is partially offset by a **declining profit margin for Sydney Airport, consistent with the broader Air and Space Transport industry** which has seen a tightening of operating conditions due to a range of factors, including costs associated with supply constraints and reduced return on productive capacity as a result of COVID-19 demand side impacts.
- A relatively larger increase in indirect value added and employment of core operations, compared to direct contribution, is due to a **significant rise in security recoverable expenses**, costs incurred by Sydney Airport for providing security services within the precinct and subsequently recovered from precinct businesses, meaning there are no implications for this increased expenditure on the direct value added.

Table 2.4: Comparison of Sydney Airport key operational activity metrics, 2019 and 2023

Activity measure	2019	2023	Share of 2019 (%)
Direct FTE employment	500	600	118%
Gross operating surplus / FTE ($m)	$2.7	$2.3	86%
Labour expenses / FTE ($)	$114,500	$168,300	147%
Total non-labour expenses ($m)	$246.3	$358.3	145%
Security recoverable expenses ($m)	$98.3	$159.2	163%

Source: Sydney Airport provided data

The key drivers of change in the contribution of precinct activity between 2019 and 2023 are (refer to Table 2.5):

- Relative to 2019, there has been an **increase in the estimated direct FTE employment** at Sydney Airport precinct despite the reduced aviation activity profile. While this can be partially attributed to the rebasing exercise informed by the bespoke business survey, it also reflects real increases in the scope of precinct operations, particularly in the case of a number of new hotel developments contributing 'new' employment relative to the initial 2012 study which was used as a base for future studies.
- Direct value added has seen a marginal decline relative to 2019 which is largely attributable to **tighter profit margins**, **particularly in relation to the Air and Space Transport industry**, consistent with broader economic trends as a result of COVID-19 induced macroeconomic conditions. The impact of tighter profit margins is partially offset by the wage growth across the period.
- A significant **increase in expenditure on domestically produced intermediate inputs** relative to revenue has also been observed for key industries such as Air and Space Transport, resulting in increased indirect value added relative to direct.

Table 2.5: Comparison of Sydney Airport key precinct activity metrics, 2019 and 2023

Activity measure	2019	2023
Direct FTE employment	29,900	31,600
Air and Space Transport – gross operating surplus as a share of revenue	14%	4%
Air and Space Transport – spend on domestic inputs as a share of revenue	47%	50%
Total value added / direct value added based on industry composition	1.8	2.2

Source: ABS Input-Output tables 2021-22 and 2018-19 and Deloitte Access Economics

Comparison of facilitated tourism contribution

A comparison of the economic contribution of facilitated tourism between 2023 and 2019 is shown Table 2.6 below:

Table 2.6: Economic contribution of facilitated tourism, 2019 and 2023

Measure	2019	2023	Share of 2019 (%)
Direct value added ($b)	$7.6	$8.1	107%
Indirect value added ($b)	$7.2	$7.5	104%
Total value added ($b)	$14.8	$15.6	105%
Direct FTE employment	83,200	89,000	107%
Indirect FTE employment	61,900	53,400	86%
Total FTE employment	145,100	142,400	98%

Source: Deloitte Access Economics

The key drivers of change in the contribution of facilitated tourism between 2019 and 2023 are (refer to Table 2.7):

- The modest increase in the direct value added contribution of facilitated tourism is directly linked to the observed **increase in facilitated visitor spend**, coupled with **high wage growth as a result of inflationary pressures**. The tourism sector has been **relatively resilient to the economy-wide squeeze on profit margins**, and indeed has been able to improve margins in many cases, through implementation of new and quality products, lifting consumer expectation on travel costs overall.
- The proportionate increase in total value added relative to a decrease in total FTE employment is driven by a combination of **high wage growth due to inflationary pressures, in addition to tourism sector supply chain labour productivity improvements over the period**.

Table 2.7: Comparison of Sydney Airport facilitated tourism activity metrics, 2019 and 2023

Activity measure	2019	2023	Share of 2019 (%)
Facilitated international visitor nights (m)	123.0	107.0	87%
Facilitated international visitor spend ($b)	$12.8	$12.2	95%
Facilitated domestic visitor nights (m)	19.9	17.8	89%
Facilitated domestic visitor spend ($b)	$3.2	$4.2	131%
Total facilitated spend ($b)	$16.0	$16.4	103%

Source: Tourism Research Australia, Deloitte Access Economics

Comparison of facilitated freight contribution

A comparison of the economic contribution of facilitated freight between 2023 and 2019 is shown in Table 2.8 below:

Table 2.8: Economic contribution of facilitated freight, 2019 and 2023

Measure	2019	2023	Share of 2019 (%)
Direct value added ($b)	$8.4	$7.0	83%
Indirect value added ($b)	$7.5	$4.4	59%
Total value added ($b)	$16.0	$11.4	71%
Direct FTE employment	89,000	59,100	66%
Indirect FTE employment	46,000	36,600	80%
Total FTE employment	134,700	95,800	71%

Source: Deloitte Access Economics

The key drivers of change in the contribution of facilitated freight between 2019 and 2023 are (refer to Table 2.9):

- An overall shift in the export profile over time has had implications for the economic contribution of facilitated freight, **including significantly larger component of airfreight related to 'Non-ferrous metal manufacturing'** (covering manufacturing of precious gems and metals that do not contain significant iron)
    - This highly automated industry has a **low labour intensity** requirement, resulting in relatively lower direct FTE employment requirements in comparison to export value.
    - That said, the non-ferrous metal manufacturing sector is generally considered a **high-skill industry**, resulting in direct value added has declining since 2019 to a lesser extent than direct FTE employment.
- **Significant labour productivity** improvements in recent years, in 'Professional, scientific, computer and electronic equipment manufacturing', and 'Other manufactured products' combined made up around 40% of airfreight exports in 2023. Technological advances, including growth in the use of AI and machine learning products, have also contributed to declining FTE employment estimates.
- The shift in the air export commodity profile also has implications on domestic supply chain requirements, which in 2023 have been redirected to more labour intensive and low margin industries acting to decrease the indirect contribution in both value added and, to a lesser extent, FTE employment.

Table 2.9: Comparison of Sydney Airport facilitated freight activity metrics, 2019 and 2023

Activity measure	2019	2023	Share of 2019 (%)
Airfreight exports – value ($b)	$21.6	$20.2	94%
Airfreight exports – tonnage	213,000	134,300	63%
Non-ferrous metal exports – share of export value	18%	33%	

Source: MariTrade

Note: 2019 results are based on BITRE data as that is what was used for the 2019 analysis.

2.6 Economic contribution per typical international service

When estimates of the economic contribution of Sydney Airport's core operations and precinct activity are combined with the facilitated passenger and freight volumes, it is estimated that:

- A typical daily international service contributed $172 million in value added and supported an estimated 1,100 FTE jobs in Australia in 2023.
- Comparatively, an Airbus A380 daily service from Singapore, a higher yielding source market with higher load factors, contributed $329 million in value added and supported an estimated 2,100 FTE jobs in 2023 while a daily service on the same aircraft from the United Kingdom contributed $262 million in value added and supported an estimated 1,700 FTE jobs in 2023.

Table 2.10: Economic contribution per typical daily service in 2023

Service	Value added ($ million)	FTE jobs
International (average)		
A380	$312	2,000
Typical	$172	1,100
United Kingdom		
A380	$262	1,700
Typical	$195	1,300
Singapore		
A380	$329	2,100
Typical	$243	1,600

Source: Deloitte Access Economics

In interpreting these results, it is important to understand what they represent. In particular, estimates of per flight economic contribution reflect what a typical daily service contributed to the economy at a particular point in time (i.e., 2023), based on key modelling parameters and assumptions. These estimates do not represent how much value added would be gained or lost if these flights did or did not occur, as they do not account for resource constraints.

For example, if additional flights were added, the sector must employ more workers and will likely need to invest more capital. The majority of both the additional labour and capital used will be drawn from elsewhere in the economy, and therefore reduce output in the sectors from which they are drawn. Estimating the economic impact to the economy as a whole of changing flight patterns or of additional or fewer flights would require a dynamic model and the establishment of a counterfactual.

3 The future contribution of Sydney Airport

The economic contribution of Sydney Airport over the coming years will be shaped by a number of factors, including air traffic and passenger activity growth, as well as changes in supply productivity, variations in segmental profile of demand and the macroeconomic landscape more broadly. For the purposes of producing high level forward estimates, the future contribution of Sydney Airport is measured by assigning different rates of aviation activity growth, namely passenger movements or aircraft movements, to different components of airport activity. The approach is applied to both operational precinct activity and facilitated off-site activity.

To project the growth in value added to 2045:

- The operational precinct activity is expected to grow based on forecasts for passenger and airline movements provided by Sydney Airport, with different growth rates depending on their business type. For instance, retail operations are anticipated to grow in proportion to passenger movements, while ground handing is modelled to grow in proportion to aircraft movements.
- Facilitated visitor expenditure is expected to grow in proportion to projected passenger movements.
- Freight is expected to grow in line with projected aircraft movements.

While forward projections of aviation activity underpin the outlook for the economic contribution of Sydney Airport, estimates of FTE jobs are also adjusted for productivity growth over time. Productivity assumptions are based on Deloitte Access Economics macroeconomic forecasts of value added and employment by industry. Growth in FTE jobs estimates have an inverse relationship with growth in labour productivity, reflecting that with productivity improvements less labour is required to produce a certain level of output and value added.

In this way, different components of airport operations are forecast to grow at different rates, dependent on the forecast rate of activity growth and productivity outlook. Ultimately, there are a range of factors that will drive variations in the future contribution of the airport, so these forecasts should be considered as high level central estimates based on the current profile of activity.

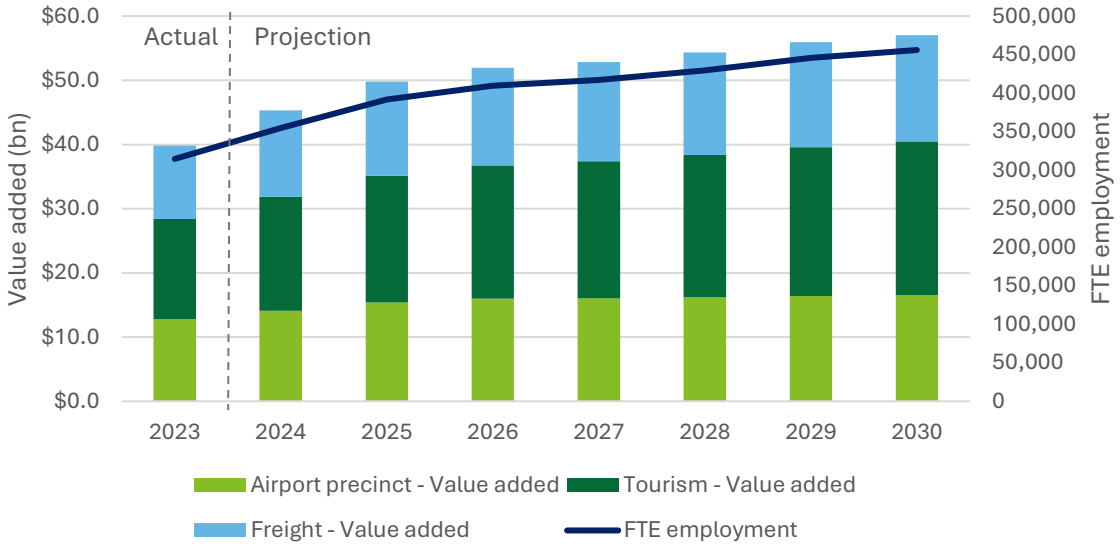
Using this method of assigning relevant growth rates to components of the airport activity gives the following projections for Sydney Airport's future economic contribution:

- The economic value added supported and facilitated by Sydney Airport is projected to increase in real terms from $39.8 billion in 2023 to an estimated $57.0 billion in 2030 and **$70.6 billion in 2045**. Total employment is projected to grow to 456,000 FTE jobs by 2030 and **569,000 FTE jobs by 2045**.
- The contribution of Sydney Airport core operations and precinct activity will increase from $12.8 billion in value added in 2023 to $16.6 billion by 2030, and **$17.8 billion by 2045**. Total FTE employment supported will grow from 76,400 in 2023 to 98,500 in 2030, then to **105,600 by 2045**.
- Sydney Airport facilitated tourism is projected to contribute $23.9 billion value added and 219,000 FTE jobs by 2030, reaching **$33.0 billion in value added** and **300,100 FTE jobs by 2045**.
- The contribution of facilitated freight is expected to reach $16.6 billion in value added and 137,700 FTE jobs by 2030, and **$19.8 billion in value added** and **163,300 FTE jobs in 2045**.

Chart 3.1 shows the contribution in value added terms of each component in addition to aggregate FTE employment until 2030.

Refer to Appendix G for detailed tables of the estimated future contribution of Sydney Airport.

Chart 3.1: Projected contribution of Sydney Airport, 2023 to 2030



Source: Deloitte Access Economics

Table 3.2 below outlines the individual contribution of each component of Sydney Airport activity through to 2045 – the timeframe for the Sydney Airport Master Plan 2045.

Table 3.2: Projected contribution of Sydney Airport, 2023 to 2045

	2023	2024	2025	2026	2027	2028	2029	2030	2045
Core and precinct business operations									
Value added ($b)	$12.8	$14.1	$15.4	$16.0	$16.0	$16.2	$16.4	$16.6	$17.8
Employment (FTE)	76,400	84,600	90,800	94,100	94,400	95,400	97,300	98,500	105,600
Facilitated tourism									
Value added ($b)	$15.6	$17.8	$19.7	$20.8	$21.4	$22.2	$23.2	$23.9	$24.0
Employment (FTE)	142,400	157,200	179,700	190,300	195,500	202,800	213,000	219,800	300,100
Facilitated freight									
Value added ($b)	$11.4	$13.4	$14.7	$15.2	$15.4	$15.9	$16.3	$16.6	$19.8
Employment (FTE)	95,800	113,100	121,300	125,400	127,200	131,200	135,300	137,700	163,300
Total									
Value added ($b)	$39.8	$45.3	$49.8	$52.0	$52.8	$54.3	$55.9	$57.0	$70.6
Employment (FTE)	314,600	354,800	391,800	409,800	417,100	429,400	445,600	456,000	577,200

Source: Deloitte Access Economics

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Tourism Research Australia [TRA] (2024)

- International Visitor Survey
- National Visitor Survey
- Regional Tourism Satellite Accounts, 2019-20

Appendix A Results for 2017, 2019 and 2023

The table below summarises key performance results across the 2017, 2019, and 2032 reporting years, noting that there have been refinements in methodology and data sources as outlined throughout this report.

Table A1: Economic contribution of Sydney Airport's core and precinct operations, 2017, 2019 and 2023

Measure	2017	2019	2023
Direct value added ($b)	$6.1	$6.5	$6.3
Indirect value added ($b)	$4.3	$4.5	$6.5
Total value added ($b)	$10.3	$11.0	$12.8
Direct FTE employment	29,800	30,400	32,200
Indirect FTE employment	25,000	24,200	44,200
Total FTE employment	54,800	54,700	76,400

Source: Deloitte Access Economics

Table A2: Economic contribution of facilitated tourism, 2017, 2019 and 2023

Measure	2017	2019	2023
Direct value added ($b)	$7.5	$7.6	$8.1
Indirect value added ($b)	$7.3	$7.2	$7.5
Total value added ($b)	$13.9	$14.8	$15.6
Direct FTE employment	86,400	83,200	89,000
Indirect FTE employment	61,800	61,900	53,400
Total FTE employment	159,900	145,100	142,400

Source: Deloitte Access Economics

Table A3: Economic contribution of facilitated freight, 2017, 2019 and 2023

Measure	2017	2019	2023
Direct value added ($b)	$6.9	$8.4	$7.0
Indirect value added ($b)	$6.5	$7.5	$4.4
Total value added ($b)	$13.4	$16.0	$11.4
Direct FTE employment	86,700	89,000	59,100
Indirect FTE employment	34,500	46,000	36,600
Total FTE employment	121,200	134,700	95,800

Source: Deloitte Access Economics

Table A4: Total supported and facilitated economic contribution of Sydney Airport, 2017, 2019 and 2023

Measure	2017	2019	2023
Direct value added ($b)	$20.4	$22.5	$21.5
Indirect value added ($b)	$18.1	$19.2	$18.3
Total value added ($b)	$37.6	$41.8	$39.8
Direct FTE employment	204,000	202,600	180,400
Indirect FTE employment	134,500	132,100	134,200
Total FTE employment	338,500	334,500	314,600

Source: Deloitte Access Economics

Appendix B Sydney Airport precinct business survey

The Sydney Airport precinct business survey

The analysis of the Sydney Airport precinct was underpinned by a bespoke survey of precinct businesses. The survey collected information from businesses operating on the Sydney Airport precinct including information on individual business employment, revenue, and expenses across the 2023 calendar year.

The survey was distributed to a sample of over 300 email addresses including ASIC holding businesses and lease holding businesses operating on the Sydney Airport precinct. Contact information for businesses provided by Sydney Airport was supplemented with publicly available information where available.

An introductory email was sent by Sydney Airport to the sample of businesses to introduce the study and outlined the purpose of the survey. Following the introduction, a link to the online survey was distributed by Deloitte Access Economics. The survey was in field in May 2024. In total, 66 businesses responded to the survey.[4]

In particular, the survey sought the following information:

- Duration of operations on the Airport precinct
- Industry classification
- Headcount and FTE employment for the 2023 calendar year
- Total labour and non-labour costs for the 2023 calendar year
- Total revenue for the 2023 calendar year.

Questions requesting financial information were voluntary and not all respondents provided this information.

The survey data was primarily used to inform estimation of the FTE employment associated with each ASIC holding business and each lease holding business operating on the Sydney Airport precinct (see Section 2.2).

Survey responses were reviewed for internal contradictions, such as EBITDA exceeding revenue, and outliers were removed to reduce bias specifically in relation to estimates of FTE employment. A small number of responses to affected questions were removed as a result of this cleaning process.

Surveying key precinct businesses

A bespoke approach was taken to surveying the ten largest employers operating on the Sydney Airport precinct, as identified based the ASIC data. Based on ASIC counts, these ten employers comprised approximately 47% of the total employment on the precinct in 2023. Each business was approached individually to support survey completion to ensure their contribution to the analysis.

Of these ten employers, eight submitted responses to the survey representing 9,334 (or 38%) of the total ASIC count.

These businesses were assessed individually in the estimation of their precinct-based FTE employment using the implied ratio of FTE employment to headcount based on their survey responses.

[4] This figure includes businesses which completed the full survey or provided at least their FTE employment information.

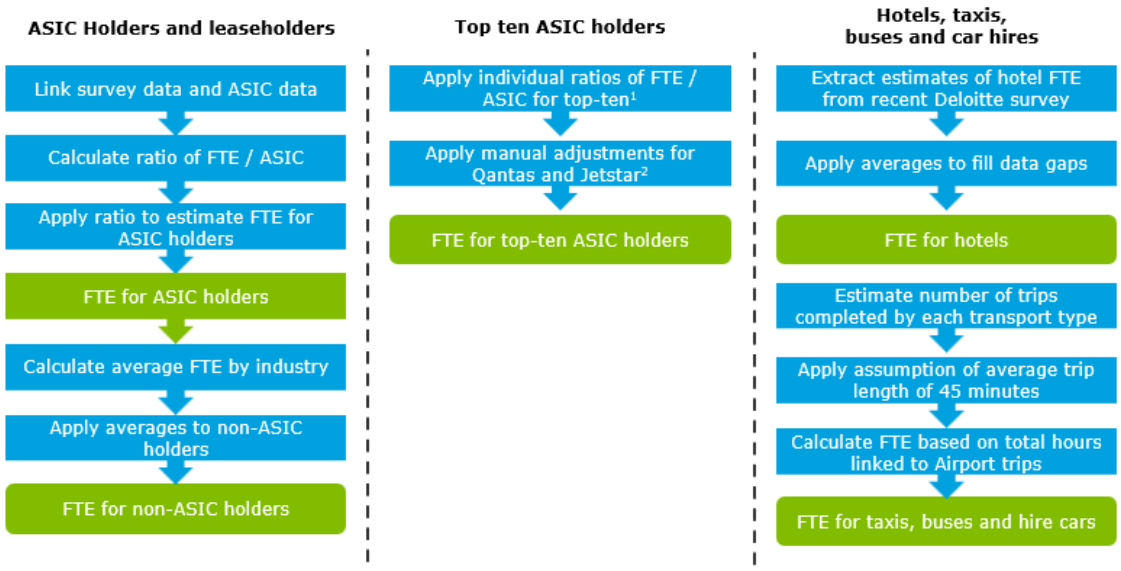
Estimating the employment profile of the Airport precinct

As highlighted throughout the report, the results of the precinct business survey were leveraged alongside secondary data sources to estimate the employment profile of the Sydney Airport precinct, which formed the key input into the modelling of the precinct's economic contribution.

In addition to the precinct business survey, the following data sources were used to estimate precinct related FTE employment:

- **Internal Sydney Airport ASIC and leaseholder databases**: To inform the profile of precinct businesses, Sydney Airport provided a list of all businesses which hold ASICs for Sydney Airport as of 2024 and how many are held by each business, in addition to a list of all leaseholders
- **Sydney Airport provided access fee data**: Data on revenue related to access fees for specific transport types to support analysis of taxis, buses and car hires as they relate to the Sydney Airport precinct.
- **Other secondary data sources:** Including Australian Bureau of Statistics (ABS) input-output tables and census data.

Figure B1: Approach to estimating precinct related FTE employment



Source: Deloitte Access Economics

Note: (1) Where data was not provided by organisations (i.e., for Swissport and Department of Home Affairs), the overall average was applied. (2) Qantas and Jetstar were treated separately given recent analysis undertaken by Deloitte in 2023 which estimated the direct FTE employment contribution of Qantas and Jetstar in NSW and Sydney specifically. Further, Qantas was consulted directly to inform estimates of FTE employment. These direct FTE employment estimates were applied to this precinct analysis. Qantas and Jetstar form a significant portion of the overall FTE employment estimates contributing over 10,000 FTE employment.

The approach to estimating precinct related FTE employment is outlined in Figure B1 above, which provides a visual representation of the following key steps:

- The ASIC data was first linked with the survey data at the business level to calculate a ratio of FTE / ASIC based on each businesses reported FTE employment and their ASIC count.
- The average ratio of FTE / ASIC was then calculated excluding the top ten ASIC holders (which were treated individually) and outliers. The average was 0.66 FTE employment for each ASIC.
- This ratio was then applied to each individual business' ASIC count based on the ASIC data to estimate their FTE employment and then aggregated by industry.
- For businesses which were non ASIC-holders, the estimated average FTE employment of their specific industry was applied as a proxy for their FTE employment.

- Estimates of FTE for the top-ten ASIC holding businesses were derived from each businesses unique FTE / ASIC ratio based on the survey. Qantas and Jetstar were adjusted manually based on direct input from Qantas as to the employment based on the Sydney Airport precinct.

FTE employment associated with hotels, taxis, buses and hire cars were treated separately as these did not fall into the ASIC or leaseholder group:

- The FTE employment associated with taxis, buses and hire cars was estimate based on access fee data provided by Sydney Airport which indicated the total number of trips to and from the Airport taken by each type. This was combined with assumptions of average trip length to determine total hours and hence FTE employment.
- Estimates of precinct hotel related FTE employment were based on a recent Deloitte survey of hotels in NSW, including many of the hotels operating on the precinct. An average of FTE employment of these hotels was applied to fill data gaps where necessary (i.e., where there was not a direct survey response from a precinct hotel).

Appendix C Economic contribution approach

Economic contribution studies are intended to quantify measures such as value added, exports, imports and employment associated with a given industry or firm, in a historical reference year. The economic contribution is a measure of the economic value of production by a firm or industry at a point in time.

Value added

Value added is the most appropriate measure of an industry's or company's economic contribution to gross domestic product (GDP) at the national level, or gross state product (GSP) at the state level. Other measures, such as total revenue or gross output, may be easier to estimate than value added but they 'double count'. That is, they overstate the contribution of a particular part of the economy because they include, for example, the value added by external firms supplying inputs or the value added by other industries.

The economic activity accounting framework is presented in Chart C.1 , showing how total revenue can be disaggregated into component parts in order to measure the economic contribution of an entity or industry. The framework demonstrates the definition of value added being the difference between total revenue and intermediate inputs.

When calculating the gross operating surplus (GOS) for a typical for-profit firm or industry, income streams from government (such as transfers or production subsidies) are excluded as they are a transfer of public funds, not reflective of income supported by the activities of the firm or industry. However, for non-profit organisations providing a service that generates external, non-use benefits that are not reflected in market prices, government transfers are included in the GOS calculation as they are fundamental to ongoing. Similarly, value added is typically calculated as GOS plus labour income net of subsidies.

Direct and indirect contribution

The direct economic contribution is a representation of the flow from labour and capital within the sector of the economy in question.

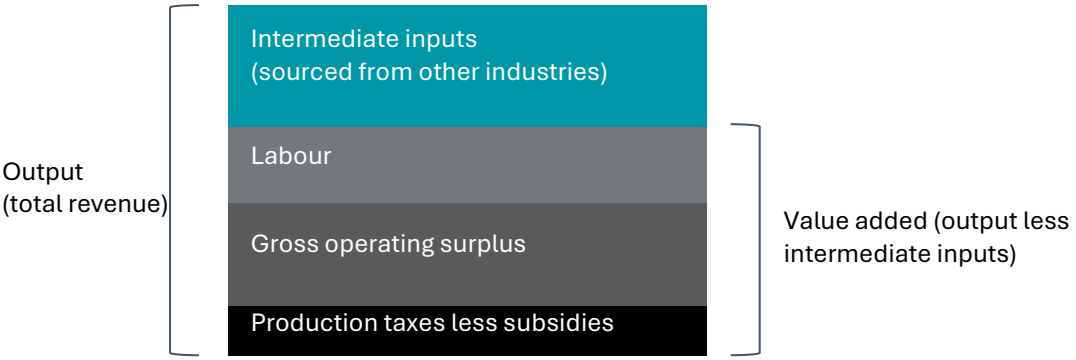
The indirect contribution is a measure of the demand for goods and services produced in other sectors as a result of demand supported by the sector in question. Estimation of the indirect economic contribution is undertaken in an input-output (IO) framework using Australian Bureau of Statistics input-output tables which report the inputs and outputs of specific sectors of the economy.

IO tables are required to account for the intermediate flows between sectors. These tables measure the direct economic activity of every sector in the economy at the national level. Importantly, these tables allow intermediate inputs to be further broken down by source. These detailed intermediate flows can be used to derive the total change in economic activity for a given sector.

A widely used measure of the spill over of activity from one sector to another is captured by the ratio of the total to direct change in economic activity. The resulting estimate is typically referred to as 'the multiplier'. A multiplier greater than one implies some indirect activity, with higher multipliers indicating relatively larger indirect and total activity flowing from a given level of direct activity.

The total economic contribution to the economy is the sum of the direct and indirect economic contributions.

Chart C.1: Economic activity accounting framework



Source: Deloitte Access Economics

Limitations of economic contribution studies

In a fundamental sense, economic contribution studies are simply historical accounting exercises. The analysis — as discussed in the report — relies on a national input-output table modelling framework and there are some limitations to this modelling framework. The analysis assumes that goods and services provided to the sector are produced by factors of production that are located completely within the state or region defined and that income flows do not leak to other states.

The IO framework and the derivation of the multipliers also assume that the relevant economic activity takes place within an unconstrained environment. That is, an increase in economic activity in one area of the economy does not increase prices and subsequently crowd out economic activity in another area of the economy. As a result, the modelled total and indirect contribution can be regarded as an upper-bound estimate of the contribution made by the supply of intermediate inputs.

Appendix D Facilitated tourism methodology

Data sources

The following data sources were used to inform the contribution of facilitated tourism:

- Tourism Research Australia's International visitor Survey (IVS) and National visitor Survey (NVS) for total visitors, visitor nights and regional expenditure in Australia and NSW. This data can be decomposed by source market, use of transportation, and purpose of visit.
- TRA's Regional Tourism Satellite Account 2019-20 framework to estimate the economic contribution of facilitated tourism activity in Australia and NSW.

Facilitated international visitor expenditure

TRA data is used to estimate total international visitors and visitor nights in Australia and NSW. Using TRA data filters on visitor stopover, transportation type and city of arrival and departure, it is possible to estimate visitors that use Sydney Airport either internationally or domestically during their trip, and their associated number of nights that can be attributable to the Airport.

In particular, of the 87.1 million international visitor nights spent in NSW in 2023, 84.7 million are facilitated by Sydney Airport. The remaining nights in NSW can be attributed to international visitors who stopover in NSW via an alternate international airport, car or other forms of transport. Further, Sydney Airport facilitated a total of 106.9 million nights across Australia, whereby nights spent in other states by travellers which arrived and/or left Australia via Sydney Airport are attributed to Sydney Airport as facilitated.

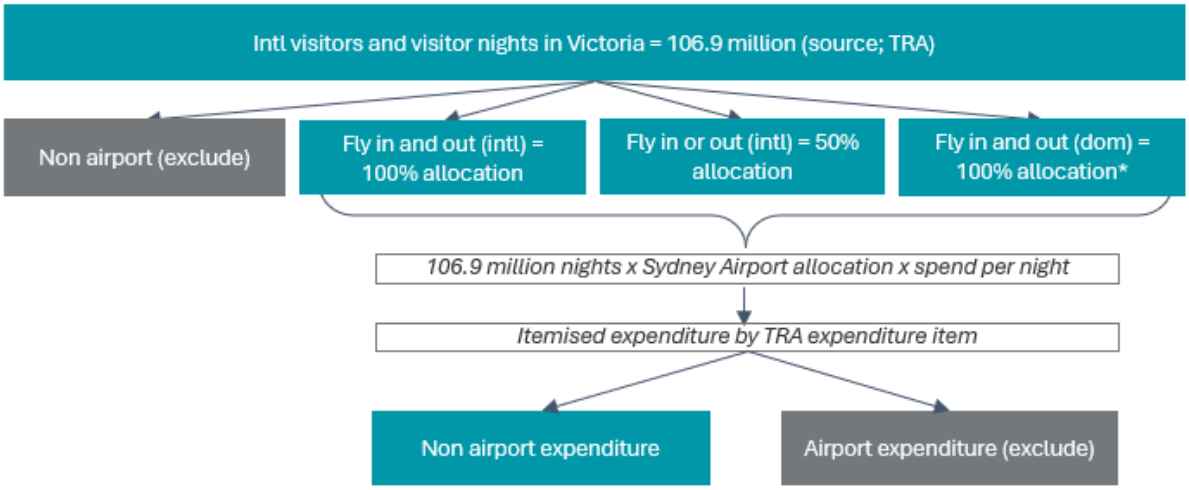
Given the significance of the international visitation facilitated by Sydney Airport and the expectation that this would closely match the source market and purpose of visit profile of the broader international visitor market, a high level spend per night assumption of the average international visitor in Australia is applied. This was calculated based on 2023 TRA data.

However, not all expenditure of international visitors who arrive or depart through Sydney Airport can be attributed to Sydney Airport. For instance, for international visitors who arrive through Sydney Airport (on an international flight) and depart through Melbourne Airport (on an international flight), only half of their expenditure in can be attributed to Sydney Airport. The remaining 50% of their expenditure would be attributed to Melbourne Airport.

After accounting for expenditure that is partially facilitated through other airports, expenditure on airfares is also excluded. This is to avoid double counting, as these items are captured (in full or in part) by the airport core operations and precinct contribution.

See Figure D1 for an overview of the facilitated tourism expenditure allocation method.

Figure D1: Overview of facilitated tourism contribution methodology, international visitors



Source: Deloitte Access Economics
Note: *For international visitors who fly in and out of Sydney Airport domestically (but do not leave or arrive in Australia via Sydney Airport), only their spend in NSW is attributed.

Facilitated domestic visitor expenditure

A similar process is used to estimate domestic visitor expenditure within NSW that is facilitated by Sydney Airport. TRA data is used to estimate domestic visitors and visitor nights that use Sydney Airport during their trip. Estimates for per trip expenditure are applied to arrive at the tourism expenditure for domestic visitors who use Sydney Airport. The expenditure on airfares and within airport precincts is excluded to avoid double counting.

Measures of tourism activity

There are two measures of tourism activity presented in this report:

- **Visitor expenditure** is a measure of the aggregate price of goods paid by the consumer or a reflection of the price impact on visitors. It includes components that are not directly related to the industries producing the goods and services for tourism purposes, including imports, product taxes, and wholesale margins. It is necessary to adjust for these non-industry components of supply.
- **Value added** is the most appropriate measure of economic contribution as it ensures no 'double counting' of components of spend that should be allocated to other industries. For example, taxes on products (such as the goods and services tax) are recognised as a component of the Government services industry, while wholesale margins should be allocated to the economic activity associated with the wholesale trade industry.

Tourism Satellite Account Framework

This analysis uses the TSA approach to measuring the economic contribution of induced tourism. The TSA framework is conceptually similar to and draws on the ABS IO tables to generate results. The framework is based on an international approach to defining the tourism sector and different tourism products and related industries depending on the extent to which they interact with tourists either directly or indirectly.

Direct contribution of tourism

A direct contribution occurs where there is a direct relationship, both physical and economic, between the visitor and the producer of the good or service. Direct tourism output is essentially the amount of tourism consumption less net product taxes, wholesale and transport margins and imports.

In the case of retail goods purchased by visitors, only the retail margin contributes to direct tourism output, value added and Gross Regional Product. This is because it is deemed that only the retailer has a direct relationship with the visitor and is therefore part of the tourism industry. As a consequence, the

output, and consequently value added, attributed to other (than retail) industries is excluded from the value of direct tourism output. Direct tourism output is therefore equal to internal tourism consumption at basic prices less the cost to retailers of domestic goods sold directly to visitors.

Direct tourism gross value added shows only the 'value' which a producer adds to the raw material goods and services it purchases in the process of producing its own output. Direct tourism gross value added is measured as the value of the output of tourism products by industries in a direct relationship with visitors less the value of the inputs used in producing these tourism products.

Indirect contribution of tourism

The indirect effect of tourism consumption is a broad notion that covers upstream and supplier effects of tourism demand. Intermediate inputs represent those goods and services which support the supply of the tourism product – the cleaning services that are inputted to the hotel sector; the fuel that is inputted to the aviation industry; the fruit and vegetables that are inputted to the restaurant industry. Together with any upstream impacts, it is these flow-on effects which determine the tourism industry's indirect contribution.

The definition of direct and indirect are slightly different in the TSA approach as direct is defined as activity involving a direct interaction with tourists. Accordingly, the ratio of direct and indirect activity differs from results using a standard IO approach. However, estimates of total value added and employment should be similar across the two approaches.

Appendix E Facilitated freight data

Analysis of facilitated freight was informed by MariTrade data providing airfreight exports value and tonnage from Sydney Airport in 2023 by commodity item and underpinned by the Deloitte Access Economics Regional Input-Output Model.

In prior iterations of the work, analysis of facilitated freight was based on BITRE data. The shift to MariTrade data is important to note as although both MariTrade and BITRE are based on ABS customs data, there are some observable differences in the estimates of total freight exported by Sydney Airport due to the data cleaning process undertaken by MariTrade. In particular, the majority of the difference can be explained by 'Commodities and transactions not included Merchandise Trade' which have been removed in the MariTrade data as this category generally reflects temporary exports or re-exports. They have removed to ensure that that statistics accurately reflect the flow of goods intended for commercial purposes rather than temporary or non-commercial transactions.

Table E1: Comparison of BITRE and MariTrade airfreight exports for Sydney Airport, 2019

Top ten commodities, based on value	**2019 BITRE ($ millions)**	**2019 Mari Trade ($ millions)**
Commodities and transactions not included in Merchandise Trade	6,212.3	0.1
Professional, Scientific, Computer and Electronic Equipment Manufacturing	5,537.9	4,979.4
Basic Non-Ferrous Metal Manufacturing	2,571.6	3,462.5
Other Manufactured Products	1,702.9	906.4
Human Pharmaceutical and Medicinal Product Manufacturing	1,696.3	1,281.0
Other Food Product Manufacturing	985.1	556.2
Other Services	976.5	127.9
Motor Vehicles and Parts; Other Transport Equipment manufacturing	642.0	64.3
Specialised and other Machinery and Equipment Manufacturing	476.6	1383.3
Other Non-Metallic Mineral Product Manufacturing	250.8	15.1
Total	**21,665.1**	**16,000.9**

Source: BITRE and Mari Trade

Appendix F The economic contribution of Sydney Airport to New South Wales

While the report is focused on the contribution of Sydney Airport to Australia, the analysis also considered the economic contribution of Sydney Airport to the NSW economy. Estimates of the economic contribution to NSW reflect only expenditures and economic activity that occurs within NSW.

Table F1: Economic contribution to New South Wales summary, 2023

	Direct	Indirect	Total
Core operations and precinct activity			
Value added ($b)	$6.4	$3.1	$11.9
Employment (FTE)	32,200	20,300	68,100
Facilitated tourism			
Value added ($b)	$5.6	$5.9	$11.5
Employment (FTE)	60,000	42,100	102,100
Facilitated freight			
Value added ($b)	$7.0	$2.6	$9.6
Employment (FTE)	58,100	20,800	79,000
Total			
Value added ($b)	$19.1	$11.6	$33.0
Employment (FTE)	150,300	83,300	249,200

Source: Deloitte Access Economics

The contribution to the NSW economy for each component was also estimated, in aggregate totalling $33.0 billion in value added and 249,200 FTE jobs.

Appendix G Future economic contribution tables, 2023-2045

The tables below detail the projected contribution of Sydney Airport for core operations, precinct activity and facilitated tourism and freight from 2023 to 2030, and 2045, in terms of both direct and total FTE employment and value added.

The contribution projections are underpinned by forecasts of passenger and airline movements provided by Sydney Airport and assumptions regarding future labour productivity improvements.

Table G1 reports on the contribution of Sydney Airport's core operations and precinct activity while Table G2 reports on the combined contribution of Sydney Airport's core operations, precinct activity and facilitated tourism and freight.

Table G1: Projected economic contribution of Sydney Airport's core operations and precinct activity from 2023 to 2030 and 2045

	Direct FTE employment	Total FTE employment	Direct value added ($b)	Total value added ($b)
2023	32,200	76,400	$6.3	$12.8
2024	35,500	84,600	$7.0	$14.1
2025	38,300	90,800	$7.6	$15.4
2026	39,800	94,100	$7.9	$16.0
2027	39,900	94,400	$7.9	$16.0
2028	40,300	95,400	$8.0	$16.2
2029	41,000	97,300	$8.1	$16.4
2030	41,500	98,500	$8.2	$16.6
2045	44,500	105,700	$8.7	$17.8

Source: Deloitte Access Economics

Table G2: Projected economic contribution of Sydney Airport from 2023 to 2030 and 2045

	Direct FTE employment	Total FTE employment	Direct value added ($m)	Total value added ($m)
2023	180,400	314,600	$21.5	$39.8
2024	201,200	354,800	$24.5	$45.3
2025	226,400	391,800	$26.9	$49.8
2026	237,700	409,800	$28.1	$52.0
2027	242,200	417,100	$28.6	$52.8
2028	249,800	429,400	$29.4	$54.3
2029	259,400	445,600	$30.3	$55.9
2030	265,600	456,000	$30.9	$57.0
2045	335,200	559,000	$38.2	$70.6

Source: Deloitte Access Economics

Limitation of our work

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