

Contents

Executive summary	iv
1 Introduction	6
1.1 Background	6
1.2 Overview of approach to this study	6
1.3 Structure of this report	7
2 Economic contribution of facilitated visitation	8
2.1 Passenger profile	8
2.2 Facilitated visitor expenditure	11
2.3 Facilitated visitation contribution	12
Appendix A : Economic contribution framework	14
Appendix B : Facilitated visitation contribution	18
Limitation of our work	19

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Tables

Table 1: Flight information for the LHR-PER route, 1 April 2018 to 31 January 2019	8
Table 2: Estimated flight information for the LHR-PER route, 1 April 2018 to 31 March 2019	9
Table 4: Stopover passenger segment profile information	12
Table 5: LHR-PER flight route expenditure profile by source market	12
Table 6: Economic contribution of visitation facilitated by the LHR-PER flight	13

Figures

Figure 1: Inflows to Perth Airport before travelling outbound to London	10
Figure 2: Outflows from Perth Airport after arriving from London	10
Figure 3: Passengers on the LHR-PER flight by source market	11

Executive summary

Qantas launched its direct London to Perth (LHR-PER) flight in March 2018, and the flight has facilitated direct international and interstate visitors travelling to Perth and the rest of Western Australia (rest of WA) since its inception. Qantas engaged Deloitte Access Economics to estimate the economic contribution of facilitated visitation (i.e. excluding returning residents) associated with the flight over its first year of operation.

Economic contribution of facilitated visitation

Deloitte Access Economics estimates that facilitated visitation associated with the LHR-PER direct flight contributed \$59.1 million in value added and 502 full time equivalent (FTE) jobs to the Perth economy,¹ and a further \$11.6 million in value added and 99 FTE jobs to the rest of WA economy.

The economic contribution of the facilitated visitation on the LHR-PER flight route is shown in Table i below. In total, facilitated visitation associated with the LHR-PER route is estimated to have directly contributed \$39.2 million in value added and 434 FTE jobs to the Western Australian economy in its first year of operation. The flow-on of this facilitated visitor expenditure through the economy is estimated to have indirectly contributed a further \$31.6 million in value added, and supported 167 FTE jobs in Western Australia.

Table i: Economic contribution of visitation facilitated by the LHR-PER flight

	Direct	Indirect	Total
Perth economy			
Facilitated visitor expenditure (\$m)	-	-	84.4
Value added (\$m)	32.7	26.4	59.1
Employment (FTE)	363	139	502
Rest of WA economy			
Facilitated visitor expenditure (\$m)	-	-	17.0
Value added (\$m)	6.4	5.2	11.6
Employment (FTE)	71	28	99
Total WA economy			
Facilitated visitor expenditure (\$m)	-	-	101.4
Value added (\$m)	39.2	31.6	70.7
Employment (FTE)	434	167	601

Source: Deloitte Access Economics

Note: Totals may not add due to rounding.

Facilitated visitation

The economic contribution of the LHR-PER flight route in facilitating domestic and international visitation is based on the estimated spending that occurs by passengers in Perth and rest of WA. Table ii shows the passenger segment profile data by destination and source market. No visitor expenditure is included for visitors in their home region (i.e. local residents), as this is spending that would have occurred within the economy anyway.

¹ Perth is defined as the Australian Bureau of Statistics' Experience Perth tourism region.

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International passengers stayed an average of 22.2 nights in Perth and 5.9 nights in rest of WA, spending approximately \$88 and \$66 per night, respectively. Interstate passengers tended to spend fewer nights in Perth but more nights in rest of WA, with average expenditure per night higher in both regions relative to international passengers. Passengers from rest of WA spent an average of 3.5 nights in Perth, with average expenditure of \$234 per night.

Table ii: Passenger segment profile information

Source market	Destination: Perth		Destination: Rest of WA	
	Average spend per night (\$)¹	Average length of stay (nights)	Average spend per night (\$)	Average length of stay (nights)
Perth	-	-	-	-
Rest of WA	234	3.5	-	-
Interstate	162	7.9	129	14.3
International	88	22.2	66	5.9

Source: Tourism Research Australia, visitor survey data year ending September 2018. Note: (1) destination expenditure only

In total, LHR-PER flight route passengers are estimated to have spent \$101.4 million in Western Australia, of which \$82.1 million was spent in Perth, \$17.0 million in rest of WA, and a further \$2.3 million spent at Perth Airport by transit passengers (Table iii).

International stopover passengers accounted for a significant majority of visitor expenditure (\$92.9 million, or 92% of the total). From a source market perspective, UK stopover passengers made up the largest share (\$68.1 million, 67% of the total) followed by other European stopover passengers (\$17.9 million, 18%) and North American passengers (\$2.1 million, 2%).

This expenditure is attributable to LHR-PER passengers spending an estimated 903,687 visitor nights in Perth and 247,090 visitor nights in rest of WA.

Table iii: LHR-PER flight route expenditure profile by source market

	International	Interstate	Rest of WA	Total
Stopover passengers (Perth)				
Visitor nights	878,973	16,226	8,488	903,687
Average spend per night (\$)	88	162	234	91
Total facilitated visitor expenditure (\$m)	77.5	2.6	2.0	82.1
Stopover passengers (Rest of WA)				
Visitor nights	234,655	12,435	-	247,090
Average spend per night (\$)	66	129	-	69
Total facilitated visitor expenditure (\$m)	15.4	1.6	-	17.0
Transit passengers				
Total facilitated visitor expenditure (\$m)	-	-	-	2.3
Total facilitated visitor expenditure (\$m)	92.9	4.2	2.0	101.4

Source: Deloitte Access Economics

Note: Totals may not add due to rounding.

1 Introduction

1.1 Background

Qantas Airways Limited (Qantas) engaged Deloitte Access Economics to estimate the economic contribution of facilitated visitation on the recently commenced Qantas direct London to Perth (LHR-PER) flight route. Australia's tourism industry is heavily reliant on the aviation sector, which provides international and domestic access to Australian destinations. In this way the LHR-PER flight route plays an instrumental role in facilitating visitation to Perth and the rest of Western Australia (Rest of WA).

1.2 Overview of approach to this study

Economic contribution studies provide a snapshot of the contribution of an entity or service (in this case the facilitated visitation on the LHR-PER flight route) to an economy at a particular point in time. The economic contribution is estimated for the Perth and rest of WA economies.

The economic contribution captured in this analysis is expressed in terms of the direct, indirect and total value added and employment generated in the economy by the visitation facilitated by the LHR-PER flight route. Direct value added determines the returns to capital (i.e. gross operating surplus (GOS)) and the returns to labour (i.e. employee wages) generated by direct interactions between the provider and the facilitated visitation expenditure associated with the LHR-PER flight route. Indirect value added captures the wages and GOS contributed by the facilitated visitation spend to upstream sectors that produce inputs to the direct tourism goods and services providers.

Tourism sector contributions are measured using the Tourism Satellite Accounting (TSA) framework. This framework is the internationally recognised, best practice approach to estimating the economic contribution of facilitated visitation. It adapts the concepts and methods of the Australian Bureau of Statistics' (ABS) national accounting framework in a way that is useful to measuring tourism² in a comparable framework to traditional industry.

It is important to distinguish between the various economic measures presented in this analysis. Visitor expenditure is the estimated amount spent by visitors at purchaser's prices, and so includes items such as taxes, imports and transfers. The national accounting and Tourism Satellite Accounts frameworks provide a means to determine the distinct economic contribution generated by that expenditure, excluding non-value adding (e.g. for imports, the economic value is generated in the source economy, not in WA) or non-attributable (e.g. taxes are attributable to government contribution) items.

For more background information on the methodology used to calculate economic contribution, see Appendix A and Appendix B.

Interpreting the analysis – economic contribution versus economic impact

Deloitte Access Economics routinely uses two similar but distinct approaches to measure the economic benefits of an entity, each with their own guidelines on best practice use. The first utilises Input-Output (IO) modelling to produce an estimate of economic contribution, a measure of the share of economic value added within a given region attributable to a particular activity, firm or industry. An economic contribution study is a static analysis that reflects the fixed make-up of the economy at a particular point in time, and tracks the relevant expenditures through a series of relationships between industries in the economy.

Contribution analysis does not account for opportunity cost of spending or the alternative use of resources; it is therefore not useful for comparing a possible future scenario where a shock occurs (such as an increase in tourism numbers) to a baseline case. Instead, in this case, the preferred framework is an economic impact analysis to estimate the incremental impacts generated by the scenario relative to the baseline. This is a dynamic analysis in which the allocation of finite

² Tourism differs from traditional industries as the sector is not defined by the type of product, but rather by the type of consumer.

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resources (labour and capital) within the economy change and adjust with movements in demand, prices and with time. This approach is useful for forward-looking analysis, to forecast the incremental impact over time. For example, impact analysis is the appropriate approach to understand the economic impacts of forecast visitation related to a proposed policy or a new investment.

1.3 Structure of this report

The remainder of this report details findings from analysis of Qantas passenger data for the LHR-PER flight, and estimates of facilitated visitor expenditure and economic contribution attributable to facilitated visitation. The report is accompanied by a series of technical appendices detailing the analytical framework, and detailed data and assumptions underpinning the analysis.

2 Economic contribution of facilitated visitation

This section estimates the value added to the Perth and rest of WA economies from visitor expenditure facilitated by the LHR-PER flight. The direct flight route has played an instrumental role in supporting visitation to Western Australia, both through facilitating more direct air travel for international passengers, and through providing more frequent access to domestic East Coast passengers.

2.1 Passenger profile

Qantas provided Deloitte Access Economics with passenger data for the LHR-PER direct flight for the first 10 full months of operation, from 1 April 2018 to 31 January 2019. During this period, the LHR-PER direct flight operated on 305 occasions in the outbound (Perth to London) direction and 302 occasions in the inbound (London to Perth) direction. Table 1 presents information on the number of passengers and average load factor over this period.

Table 1: Flight information for the LHR-PER route, 1 April 2018 to 31 January 2019

	Outbound	Inbound
Number of flights	305	302
Number of passengers	67,298	67,437
Average number of passengers per flight	221	223
Average passenger load factor ³	93%	95%

Source: Deloitte Access Economics; Qantas Airways Ltd

To provide a full operating year perspective on the LHR-PER flight route, Deloitte Access Economics used monthly aviation data obtained from the Bureau of Infrastructure, Transport and Regional Economics (BITRE) International Airline Activity publication to extrapolate out the LHR-PER passenger activity for the period 1 February 2019 to 31 March 2019.

Monthly passenger volume data by source market for inbound international travel to Australia was used to estimate ratios of February and March travel to an average for the other 10 months of the year (adjusted for the different number of days per month). These ratios were then applied to Qantas LHR-PER data for April 2018 to January 2019, by source market, to extrapolate international passenger activity to February 2019 and March 2019. A similar approach was taken using outbound international travel data to estimate domestic outbound passenger activity.

The extrapolated flight information over the full 12-month period is shown in Table 2.

³ Passenger load factor is a measure of capacity utilisation of an aircraft, expressed as a share of the maximum number of available seats on the aircraft. The Qantas Boeing 787-9 aircraft used for the LHR-PER direct flight has 236 seats.

Table 2: Estimated flight information for the LHR-PER route, 1 April 2018 to 31 March 2019

	Outbound	Inbound
Number of flights	364	361
Number of passengers	77,170	77,550
Average number of passengers per flight	212	215
Average passenger load factor	90%	91%

Source: Deloitte Access Economics; Qantas Airways Ltd; Bureau of Infrastructure, Transport and Regional Economics

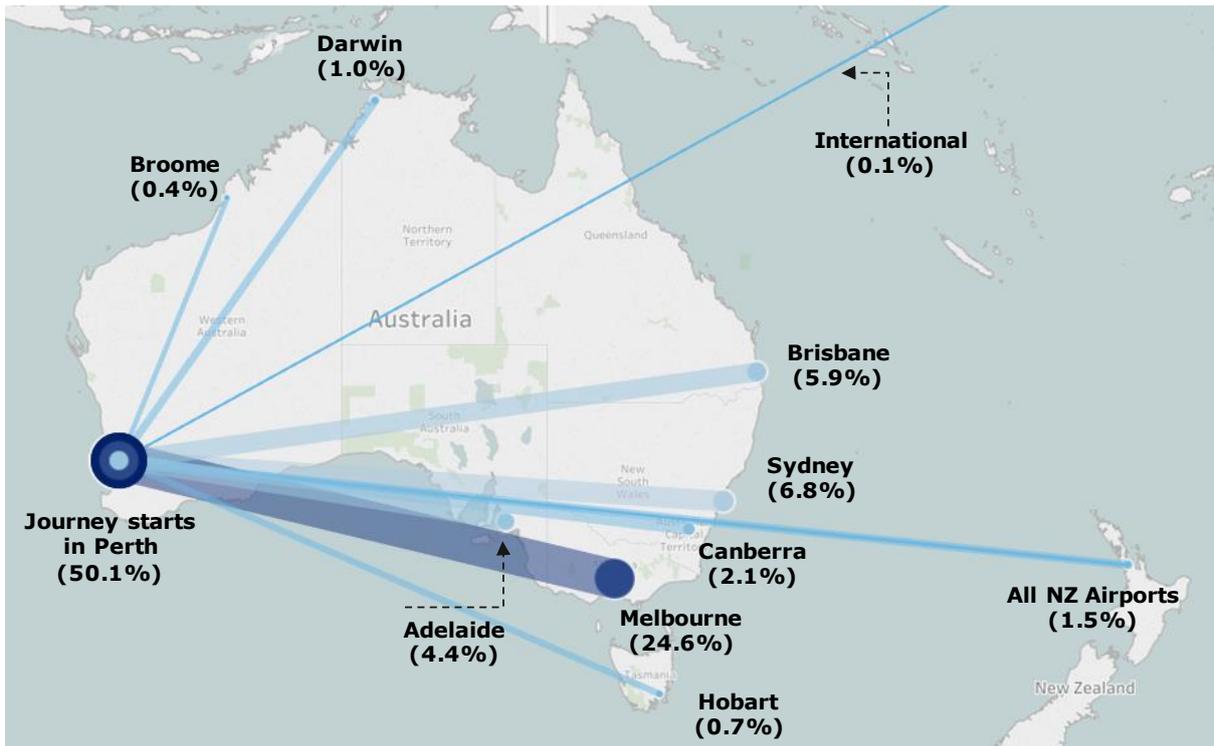
The average number of passengers per flight, and consequently average passenger load factor, is expected to be lower over the full year than the first 10 months of operation due to February and March being relatively quieter periods for international travel to and from Australia. However, passenger load factors are still estimated to be higher on the LHR-PER flight than comparable flights from the UK to Australia, which range from 83% to 86%;⁴ and domestic flights between Perth and other major state capital cities (ranging from 82% to 83%).⁵

More than half of all outbound passengers travelling from Perth to London had journeys that originated in Perth (Figure 1). A further 24.6% of outbound passengers had flight itineraries originating in Melbourne, reflecting the consolidated Melbourne-Perth-London route captured on the same flight number. Other state capitals accounted for a further 20.9% of passengers travelling to Perth before flying to London, with 2.8% from regional Australian airports and 1.6% from overseas. A similar profile is shown in Figure 2 for passengers flying out of Perth after arriving from London.

⁴ Bureau of Infrastructure, Transport and Regional Economics (BITRE), International Airline Activity publication, seat utilisation factors for flights between the UK and Australia; average over calendar years 2016 to 2018.

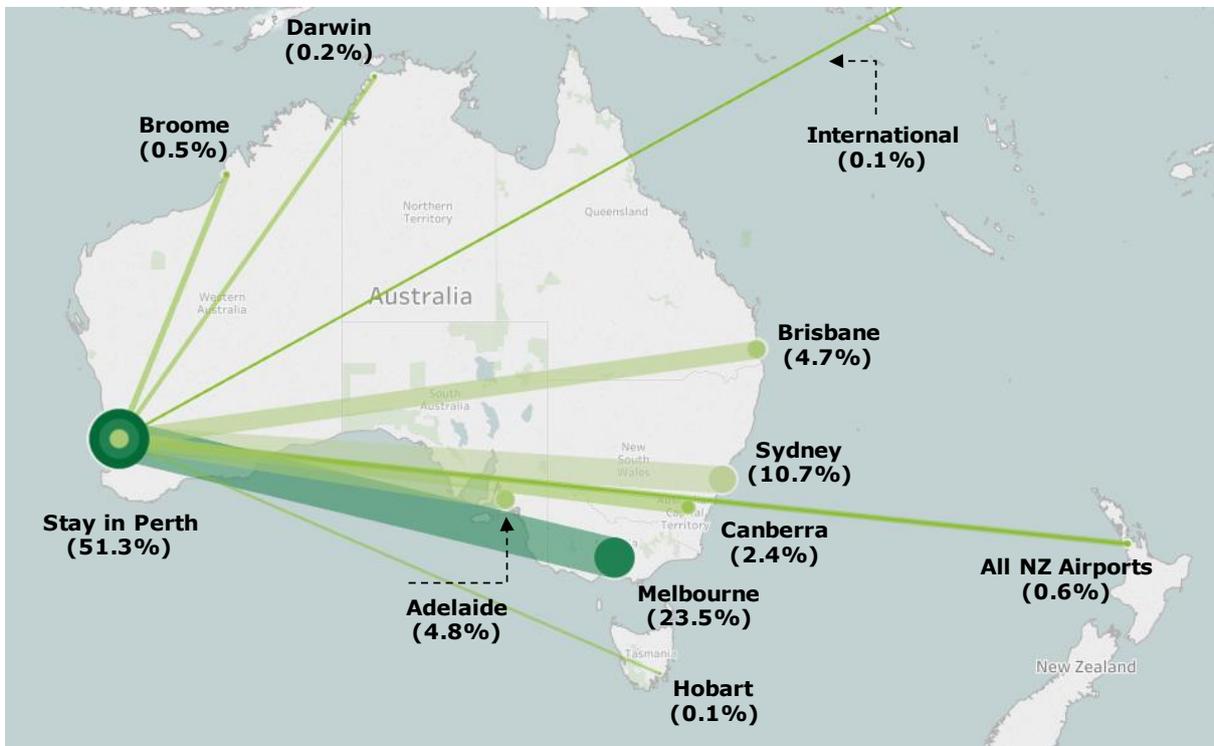
⁵ Bureau of Infrastructure, Transport and Regional Economics (BITRE), Domestic Aviation Activity publication, passenger load factors for flights Perth-Sydney, Perth-Melbourne, and Perth-Brisbane; average over calendar years 2016 to 2018.

Figure 1: Inflows to Perth Airport before travelling outbound to London



Source: Deloitte Access Economics; Qantas Airways Ltd

Figure 2: Outflows from Perth Airport after arriving from London



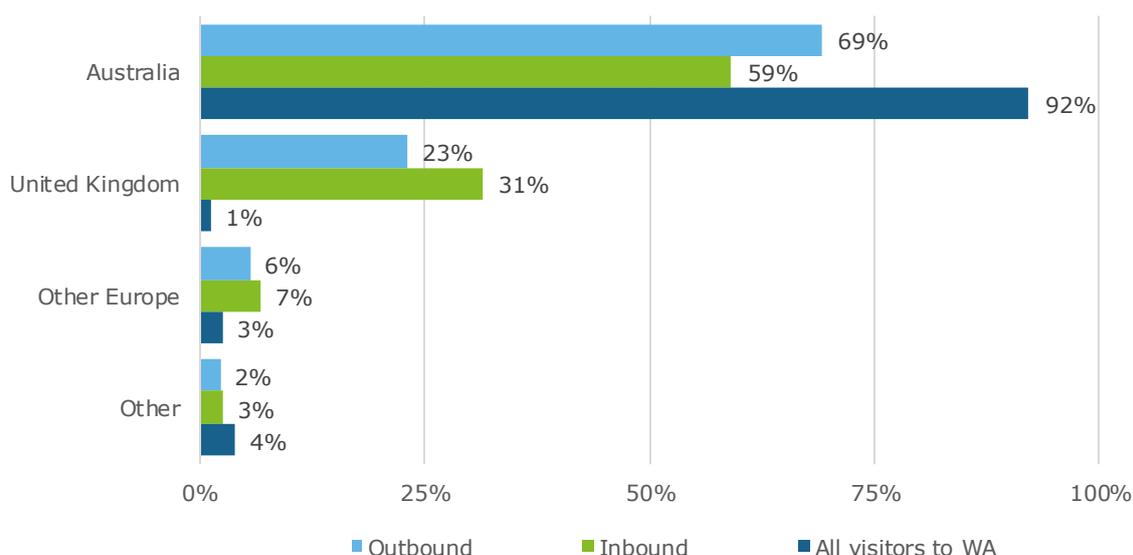
Source: Deloitte Access Economics; Qantas Airways Ltd

Source market profile

While precise information on passengers' country of residence is not available, Qantas provided information on the country in which a passenger booked a ticket. Assuming the booking country broadly reflects passenger place of residence, Australians accounted for 69% of the passenger cohort on the outbound flight, with 23% from the United Kingdom. International passengers accounted for a higher share of passengers on the inbound flight, with 31% from the UK and 59% Australians (Figure 3).

Other European passengers accounted for 6% of the outbound cohort and 7% of the inbound cohort, suggesting that some European travellers are substituting toward the LHR-PER direct flight as a means of travelling to Australia, relative to other stopover flights.

Figure 3: Passengers on the LHR-PER flight by source market



Source: Deloitte Access Economics; Tourism Research Australia

2.2 Facilitated visitor expenditure

The economic contribution of the LHR-PER flight route in facilitating domestic and international visitation is based on the estimated spending that occurs by passengers in Perth and rest of WA. The analysis identified two high level types of passengers at Perth Airport – transit and stopover. While transit passengers' spend in the airport adds some value to the WA economy, the majority of the economic contribution attributable to visitation facilitated by the LHR-PER flight results from expenditure by passengers who stopover for one or more nights in WA.

Table 3 shows the passenger segment profile data for stopover visitors by destination and source market. No visitor expenditure is included for visitors in their home region (i.e. local residents), as this is spending that would have occurred within the economy anyway.

International stopover passengers stayed an average of 22.2 nights in Perth and 5.9 nights in rest of WA, spending approximately \$88 and \$66 per night, respectively. Of the total number of international passengers using the LHR-PER service, 72% had stopovers in WA, while 28% transited through Perth Airport only.

Interstate stopover passengers tended to spend fewer nights in Perth but more nights in rest of WA, with average expenditure per night higher in both regions relative to international passengers. Stopover passengers from rest of WA spent an average of 3.5 nights in Perth, with average expenditure of \$234 per night.

Table 3: Stopover passenger segment profile information

Source market	Destination: Perth		Destination: Rest of WA	
	Average spend per night (\$)	Average length of stay (nights)	Average spend per night (\$)	Average length of stay (nights)
Perth	-	-	-	-
Rest of WA	234	3.5	-	-
Interstate	162	7.9	129	14.3
International	88	22.2	66	5.9

Source: Deloitte Access Economics

Table 4 shows the passenger and facilitated visitor expenditure profile by source market. In total, LHR-PER stopover passengers are estimated to have spent \$82.1 million in Perth, and an additional \$17.0 million in rest of WA.

International stopover passengers accounted for a significant majority of visitor expenditure (\$92.9 million, or 92% of the total). From a source market perspective, UK stopover passengers made up the largest share (\$68.1 million, 67% of the total) followed by other European stopover passengers (\$17.9 million, 18%) and North American passengers (\$2.1 million, 2%).

A further \$2.3 million is estimated to have been spent at Perth Airport by transit passengers.

Table 4: LHR-PER flight route expenditure profile by source market

	International	Interstate	Rest of WA	Total
Stopover passengers (Perth)				
Visitor nights	878,973	16,226	8,488	903,687
Average spend per night (\$)	88	162	234	91
Total facilitated visitor expenditure (\$m)	77.5	2.6	2.0	82.1
Stopover passengers (Rest of WA)				
Visitor nights	234,655	12,435	-	247,090
Average spend per night (\$)	66	129	-	69
Total facilitated visitor expenditure (\$m)	15.4	1.6	-	17.0
Transit passengers				
Total facilitated visitor expenditure (\$m)	-	-	-	2.3
Total facilitated visitor expenditure (\$m)	92.9	4.2	2.0	101.4

Source: Deloitte Access Economics

Note: Totals may not add due to rounding.

2.3 Facilitated visitation contribution

Expenditure by visitors associated with the LHR-PER flight is estimated to have contributed \$70.7 million in value added to the Western Australian economy, of which \$59.1 million (84%) was added to the Perth economy and the remaining \$11.6 million (16%) was added to the rest of WA economy.

This contribution supported the employment of 601 full time equivalent jobs, of which 502 were in Perth and the remaining 99 in rest of WA. Table 5 shows detailed estimates of the economic contribution resulting from facilitated visitor expenditure by LHR-PER passengers.

Table 5: Economic contribution of visitation facilitated by the LHR-PER flight

	Direct	Indirect	Total
Perth economy			
Value added (\$m)	32.7	26.4	59.1
Employment (FTE)	363	139	502
Rest of WA economy			
Value added (\$m)	6.4	5.2	11.6
Employment (FTE)	71	28	99
Total WA economy			
Value added (\$m)	39.2	31.6	70.7
Employment (FTE)	434	167	601

Source: Deloitte Access Economics

Note: Totals may not add due to rounding.

Appendix A: Economic contribution framework

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 value of production by a firm or industry.

All direct, indirect and total contributions are reported as gross operating surplus (GOS), labour income, value added and employment (with these terms defined in Table A.1).

Table A.1 Definitions of economic contribution estimates

Estimate	Definition
Gross operating surplus (GOS)	GOS represents the value of income generated by the entity's direct capital inputs, generally measured as the earnings before interest, tax, depreciation, and amortisation (EBITDA).
Labour income	Labour income is a subcomponent of value add. It represents the value of output generated by the entity's direct labour inputs, as measured by the income to labour.
Value added	Value added measures the value of output (i.e. goods and services) generated by the entity's factors of production (i.e. labour and capital) as measured in the income to those factors of production. The sum of value added across all entities in the economy equals gross domestic product. Given the relationship to GDP, the value added measure can be thought of as the increased contribution to welfare.
Employment (FTE)	Employment is a fundamentally different measure of activity to those above. It measures the number of workers (measured in full-time equivalent terms) that are employed by the entity, rather than the value of the workers' output.
Direct economic contribution	The direct economic contribution is a representation of the flow from labour and capital committed in the economic activity.
Indirect economic contribution	The indirect contribution is a measure of the demand for goods and services produced in other sectors as a result of demand generated by economic activity.
Total economic contribution	The total economic contribution to the economy is the sum of the direct and indirect economic contributions.

Source: Deloitte Access Economics (2017)

Definitional notes

When calculating the 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 generated by the activities of the firm or industry.

Similarly, value added is typically calculated as GOS plus labour income net of subsidies; under the ABS Australian System of National Accounts (ASNA):

A subsidy on a product is a subsidy payable per unit of a good or service. An enterprise may regard a subsidy as little different from sales proceeds. However, in the national accounts,

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subsidies are regarded as transfer payments from general government, enabling enterprises to sell their output for less than would otherwise be the case.⁶

Value added

The measures of economic activity provided by this contribution study are consistent with those provided by the Australian Bureau of Statistics. For example, value added is the contribution the sector makes to total factor income and gross domestic product (GDP).

There are a number of ways to measure GDP, including:

- **Expenditure approach** – measures expenditure: of households, on investment, government and net exports
- **Income approach** – measures the income in an economy by measuring the payments of wages and profits to workers and owners.

Below is a discussion measuring the value added by an industry using the income approach.

Measuring economic contribution

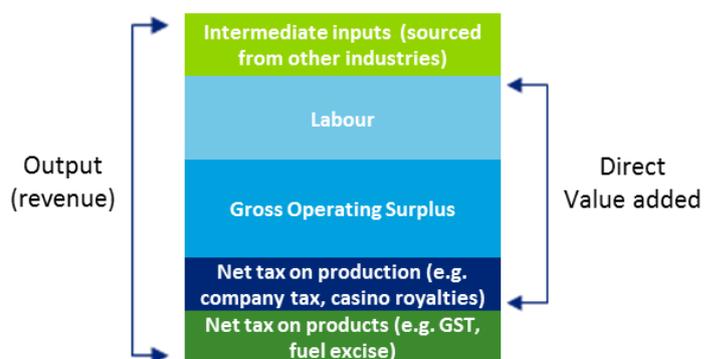
There are several commonly used measures of economic activity, each of which describes a different aspect of an industry's economic contribution:

Value added measures the value of output (i.e. goods and services) generated by the entity's factors of production (i.e. labour and capital) as measured in the income to those factors of production. The sum of value added across all entities in the economy equals gross domestic product. Given the relationship to GDP, the value added measure can be thought of as the increased contribution to welfare. Value added is the sum of:

- Gross operating surplus (GOS) represents the value of income generated by the entity's capital inputs, generally measured as the earnings before interest, tax, depreciation and amortisation (EBITDA).
- Tax on production less subsidy provided for production. Note: given the manner in which returns to capital before tax are calculated, company tax is not included or this would double-count that tax. In addition, it excludes goods and services tax, which is a tax on consumption (i.e. levied on households).
- Labour income is a subcomponent of value added. It represents the value of output generated by the entity's direct labour inputs, as measured by the income to labour.

Figure A.1 shows the accounting framework used to evaluate economic activity, along with the components that make up *output*. Output is the sum of value added and the value of intermediate inputs used by the firm or industry. The value of intermediate inputs can also be calculated directly by summing up expenses related to non-primary factor inputs.

Figure A.1 Economic activity accounting framework



Source: Deloitte Access Economics (2017)

⁶ Australian Bureau of Statistics (2013)

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Contribution studies generally outline employment generated by a sector. Employment is a fundamentally different measure of activity to those above. It measures the number of workers that are employed by the entity, rather than the value of the workers' output.

Direct and indirect contributions

The **direct** economic contribution is a representation of the flow of labour and capital from the economic activity, in this case the purchase of tourism goods and services.

The **indirect** contribution is a measure of the demand for goods and services produced in other sectors as a result of demand generated by the direct economic activity. Estimation of the indirect economic contribution is undertaken in an input-output (IO) framework using Australian Bureau of Statistics IO tables which report the inputs and outputs of specific sectors of the economy (ABS 2013).

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

Other measures, such as total revenue or total exports are useful measures of economic activity, but these measures alone cannot account for the contribution made to GDP. Such measures overstate the contribution to value added because they include activity by external firms supplying inputs. In addition, they do not discount the inputs supplied from outside Australia.

Limitations of economic contribution studies

While describing the geographic origin of production inputs may be a guide to a firm or industry's linkages with the local economy, it should be recognised that these are the type of normal industry linkages that characterise all economic activities.

Unless there is unused capacity in the economy (such as unemployed labour) there may not be a strong relationship between a firm's economic contribution as measured by value added (or other static aggregates) and the welfare or living standard of the community. The use of labour and capital by demand created from the industry comes at an opportunity cost as it may reduce the amount of resources available to spend on other economic activities. This is not to say that the economic contribution, including employment, is not important. As stated by the Productivity Commission (1999) in the context of Australia's gambling industries:

Value added trade and job creation arguments need to be considered in the context of the economy as a whole... income from trade uses real resources, which could have been employed to generate benefits elsewhere. These arguments do not mean that jobs, trade and activity are unimportant in an economy. To the contrary they are critical to people's well-being. However, any particular industry's contribution to these benefits is much smaller than might at first be thought, because substitute industries could produce similar, though not equal gains.⁷

In a fundamental sense, economic contribution studies are simply historical accounting exercises. No 'what-if', or counterfactual inferences – such as 'what would happen to living standards if the firm or industry disappeared?' – should be drawn from them.

The analysis – as discussed in the report – relies on a national IO 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

⁷ Productivity Commission (1999)

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regarded as an upper-bound estimate of the contribution made by the supply of intermediate inputs.

Similarly, the IO framework does not account for further flow-on benefits as captured in a more dynamic modelling environment like a Computerised General Equilibrium (CGE) model.

Input-output analysis

Input-output 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 associated with a given direct change in 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 IO matrix used for Australia is derived from the ABS 2013-14 IO tables, the latest available IO data at the time of the analysis. The industry classification used for IO tables is based on the Australian and New Zealand Standard Industrial Classification (ANZSIC), with 114 sectors in the modelling framework.

Appendix B: Facilitated visitation contribution

Tourism Satellite Account Framework

This analysis uses the TSA approach to measuring the economic contribution of facilitated visitation. The TSA framework is conceptually similar to and draws on the ABS Input-Output (IO) tables to generate results. It 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 visitors either directly or indirectly.

While conventional IO modelling can be applied to any sector of the economy (including tourism by using an appropriate sector-specific definition of the tourism sector), the TSA approach is Deloitte Access Economics' preferred approach to measuring the economic contribution of the tourism sector as it ensures that the analysis is consistent with international guidelines for measuring and reporting on the economic activity of the tourism sector.

Direct contribution of visitation

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 visitation output is essentially the amount of visitor 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 visitation 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 visitation output. Direct visitation output is therefore equal to internal visitor consumption at basic prices less the cost to retailers of domestic goods sold directly to visitors.

Direct visitation 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 visitation 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 visitation

The indirect effect of visitor consumption is a broad notion that covers upstream and supplier effects of visitor 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 visitors. 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.

Limitation of our work

General use restriction

This report is prepared solely for the internal use of Qantas Airways Ltd. This report is not intended to and should not be used or relied upon by anyone else and we accept no duty of care to any other person or entity. The report has been prepared for the purpose set out in our contract dated 7 February 2019. You should not refer to or use our name or the advice for any other purpose.



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