

The Contribution of International and Domestic Visitor Expenditure to the Queensland Economy: 2003–04



Office of
Economic and
Statistical
Research

The Contribution of International and Domestic Visitor Expenditure to the Queensland Economy 2003-04

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October 2006

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Abbreviations

ABS	Australian Bureau of Statistics
ANZSIC.....	Australian and New Zealand Standard Industrial Classification
GSP	Gross State Product
GST	Goods and Services Tax
IVS	International Visitor Survey
NVS.....	National Visitor Survey
OESR.....	Office of Economic and Statistical Research
TQ.....	Tourism Queensland
TRA.....	Tourism Research Australia
VFR.....	Visiting friends and/or relatives

Executive summary

Background

- This report provides details of the contribution of tourism to the Queensland economy. The Office of Economic and Statistical Research (OESR) measures this contribution by compiling a Queensland Tourism Satellite Account. This report provides details of the economic contribution of spending by international, interstate and overnight intrastate visitors and day visitors in 2003-04.
- This is the third report on the contribution of tourism to the Queensland economy prepared by OESR. The first report, *The Contribution of International and Domestic Visitor Expenditure to the Queensland Economy: 1998-99*, was released in May 2001. These initial estimates were subsequently updated in a second, regional contribution report, *The Contribution of International and Domestic Visitor Expenditure to the Queensland Regional Economies: 1998-99*, which was released in May 2002. The current report updates the aggregate Queensland estimate to 2003-04.
- It should be noted that, while the most up-to-date data have been used in the compilation of the Satellite Account, some of these data are subject to revision. These revisions can change the results significantly.
- The project has been commissioned by Tourism Queensland. OESR also contributed to the cost of the project.

Tourism's contribution to the Queensland economy in 2003-04

- Tourism in Queensland accounted for \$8.4 billion or 5.8 per cent of the State's economic activity as measured by gross state product (GSP) in 2003-04. This result is the net economic impact of \$18.0 billion in expenditure in Queensland by day visitors, interstate visitors, international visitors and Queensland residents taking day, overnight, interstate and overseas trips.
- The overnight interstate visitor sector was the largest contributor to tourism GSP (35.5 per cent or 2.0 percentage points contribution to the total of 5.8 per cent). This was followed by the overnight intrastate visitor sector (28.0 per cent or 1.6 percentage points), the international visitor sector (20.6 per cent or 1.2 percentage points), and the day-visitor sector (14.3 per cent or 0.8 percentage point).
- The contribution of tourism to the Queensland economy of 5.8 per cent of GSP in 2003-04 exceeds the Australian contribution to gross domestic product (GDP) of 3.8 per cent published by the Australian Bureau of Statistics (ABS 5249.0).
- The contribution of tourism to the economy over the period 1998-99 to 2003-04 was influenced by the introduction of the Goods and Services Tax (GST) in 2000-01. The introduction of the GST resulted in a higher-than-otherwise tourism contribution to GSP, due to price increases as product taxes were levied on the service component of tourism expenditure for the first time in 2000-01. Despite this, the economic contribution of tourism at State and national level is estimated to have fallen since 1998-99, from 6.1 per cent and 4.3 per cent, respectively.

Tourism's contribution to Queensland employment in 2003-04

- Tourism directly accounted for the employment of 136,000 persons in 2003-04, or 7.3 per cent of all jobs in the State.
- 77,100 of these were employed full-time and 58,900 were in part-time positions. The part-time proportion of 43.3 per cent was substantially above the Queensland workforce average of 28.7 per cent.
- In full-time equivalent terms, tourism accounted for 106,500 full-time equivalent jobs. This amounted to 6.7 per cent of all full-time equivalent jobs in Queensland.
- By comparison, the revised full-time equivalent tourism employment estimate for 1998-99 is 109,300, which is slightly higher than estimated 2003-04 tourism employment.

Tourism's economic contribution compared to traditional industries

- Tourism is not classified as an industry in the Australian and New Zealand Standard Industrial Classification (ANZSIC). Tourism transactions are sales from standard ANZSIC industries (e.g. retail trade, transport, etc.), to purchasers who are not in their usual domicile. Tourism sales are either a consumption or trade activity¹. Prior to 1998-99, this precluded a comparison of tourism's economic contribution with that of standard industries like agriculture, construction and mining. However, the development of the satellite account framework now facilitates estimates of the contribution of tourism sales to the production of the standard industries, allowing such a comparison to be made.
- In terms of total factor income, tourism made a larger contribution to the Queensland economy in 2003-04 than seven of the eighteen standard industries, with eleven standard industries contributing more than the tourism sector.
- Tourism contributed 4.7 per cent to Queensland's total factor income (compared with 5.8 per cent for total GSP as mentioned earlier). *Manufacturing* is the largest industrial contributor to the State economy with 10.6 per cent of total factor income. The tourism contribution is comparable to that of one of Queensland's most traditional industries, *Agriculture, forestry and fishing*, with 4.4 per cent.
- Tourism's share of gross value added at basic prices (which includes net taxes on production paid by firms, but excludes net taxes on products paid by purchasers) is also 4.7 per cent.

Other issues

- The preparation of this report has highlighted a number of areas that need further attention by statistical agencies. They relate to two very significant expenditure categories: shopping and travel packages. To ensure that the results of this study are replicable given the same set of data, common approaches need to be

¹ For a more detailed explanation of the concept of tourism transactions, see Queensland Treasury, *Queensland Economic Review*, September Quarter 1991, 'The Economic Measurement of Tourism in Queensland'.

developed with respect to the treatment and allocation of these broad expenditure items.

- Shopping expenditure accounted for \$2.8 billion or 15.7 per cent of total visitor expenditure in Queensland in 2003-04, but the precise commodity composition of this expenditure is not known. Such knowledge is necessary to allocate this expenditure to the correct industries, if an accurate assessment is to be made of the economic contribution of the spending. At opposite ends of the spectrum, the expenditure could be entirely on imported items with little local economic impact except on retail margins, or it could be on locally produced goods and services that provide a significant economic impact. The proportions of imports to local production used in this study are based on OESR's estimates.
- International visitors to Queensland in 2003-04 spent more than \$3.8 billion on travel packages. The allocation of expenditure on travel packages, which can include airfares, accommodation, meals and drinks, presents problems in that, while the total package cost is known to the visitor, the costs of individual items of the package are not. So, for the \$3.8 billion mentioned above, deductions were estimated for international airfares, time spent in other countries, and time spent in other parts of Australia, with \$495 million estimated to accrue to Queensland.

1 Introduction

1.1 Background

This report measures the economic significance of tourism to the Queensland economy in 2003-04 by estimating a Queensland Tourism Satellite Account (TSA). A TSA is recognised internationally as the best method for measuring the economic contribution of tourism. This report provides details of the economic contribution of spending by international, interstate and intrastate overnight visitors and day visitors in 2003-04.

The report has been funded by Tourism Queensland together with a significant contribution by OESR.

This is the third report on the contribution of tourism to the Queensland economy prepared by OESR. The first report, *The Contribution of International and Domestic Visitor Expenditure to the Queensland Economy: 1998-99*, was released in May 2001. These initial estimates were subsequently updated in a second, regional contribution report, *The Contribution of International and Domestic Visitor Expenditure to the Queensland Regional Economies: 1998-99*, which was released in May 2002. The current report updates the aggregate Queensland estimates to 2003-04.

1.2 Reliability of estimates

In its initial release of the Tourism Satellite Account, the ABS noted that "... some of the data had to be stretched up to the limits of their design capabilities" (*Australian National Accounts: Tourism Satellite Account 1997-98*, ABS Cat. no. 5249.0, page 24). For the production of estimates at a state level, even further 'stretching' must take place. In particular, much of the data used in this study come from surveys which will produce reliable estimates on a national scale, but which have larger standard errors and reduced reliability at a state level.

In order to enhance the accuracy of the estimates, all underlying analysis was conducted at the 106-industry level of aggregation. For reporting purposes, the results were then aggregated to the 18-industry level.

Finally, it should be noted that estimates of tourism's economic contribution depend critically on industry-level ABS data. In the past, these data have been subject to substantial revisions, resulting in corresponding revisions to OESR's tourism contribution estimates for 1998-99. It is expected that the 2003-04 data used to derive the 2003-04 Satellite Account will, in time, also be revised. This should be taken into account when using the results for analytical – particularly time series – purposes.

1.3 Outline of report

Section 2 of the report presents the major findings of the study in relation to the size of tourism's contribution to GSP. The contribution is shown by type of visitor (day visitors, international visitors, interstate visitors, or Queensland residents taking interstate or international visits) and by broad visitor purpose (tourists or for business or other reasons).

Section 3 presents the estimates for tourism total factor income. This measure enables the comparison of the tourism contribution to the State economy with that of the non-tourism components of the standard ANZSIC industries.

Section 4 examines tourism-related employment. The data cover part-time and full-time employment as well as indicative full-time equivalent measures.

Section 5 presents the gross expenditure data from which the economic contribution estimates are derived. Tables are provided of expenditure by type of visitor and commodity (airfares, accommodation, etc).

Finally, an appendix briefly outlines the methodology used to compile the estimates presented in this report.

2 Queensland Tourism Gross State Product

Main points

- Tourism GSP for Queensland in 2003-04 amounted to \$8.4 billion or 5.8 per cent of total Queensland GSP of \$146.2 billion (Table 1).
- This was the net effect of \$18.0 billion² in expenditure in Queensland by day visitors, overnight intrastate visitors, overnight interstate visitors, international visitors and Queensland residents taking overnight trips interstate and overseas (Table 1).
- The overnight interstate visitor sector was the largest contributor to tourism GSP (35.5 per cent or 2.0 percentage points contribution to the total of 5.8 per cent). This was followed by the overnight intrastate visitor sector (28.0 per cent or 1.6 percentage points), the international visitor sector (20.6 per cent or 1.2 percentage points), and the day-visitor sector (14.3 per cent or 0.8 percentage point). Expenditure by Queensland residents before or after taking their outbound trips made a minor contribution (1.5 per cent or 0.1 percentage point) (Table 1).

Table 1: Tourism GSP by type of visitor, Queensland, 2003-04

	Day visitors(a) \$m	Overnight Intrastate(b) \$m	Overnight Interstate \$m	Inter- national \$m	Out- bound \$m	Total Tourism \$m
Tourism expenditure	2,638	5,024	6,220	3,788	372	18,042
Tourism factor income	747	1,704	2,230	1,360	119	6,159
Tourism gross value added at basic prices	765	1,743	2,277	1,387	122	6,294
Tourism GSP	1,204	2,353	2,988	1,733	130	8,408
Queensland GSP						146,212
<i>Tourism contribution to GSP (percentage points)</i>	<i>0.8</i>	<i>1.6</i>	<i>2.0</i>	<i>1.2</i>	<i>0.1</i>	<i>5.8</i>

(a) Includes intrastate day visits and interstate day visits either to or from Queensland.

(b) Includes Queensland residents travelling interstate.

Source: OESR and ABS 5220.0.

- The 5.8 per cent contribution to Queensland's GSP in 2003-04 is 2.0 percentage points higher than the national figure of 3.8 per cent as shown in ABS 5249.0 (Table 2).

² The estimate of tourism GSP excludes imports and records only the value which producers add to the raw materials and services they purchase in the process of producing these tourism sales.

Table 2: Tourism GSP/GDP: Queensland and Australia, 2003-04

	Queensland \$m	Australia(a) \$m
Tourism expenditure	18,042	73,010
Tourism factor income	6,159	25,051
Tourism gross value added at basic prices	6,294	26,016
Tourism GSP/GDP	8,408	31,952
Total GSP/GDP	146,212	838,251
<i>Tourism contribution to GSP/GDP (per cent)</i>	<i>5.8</i>	<i>3.8</i>

(a) The Australian estimates include visitor expenditure on motor vehicles and other capital equipment. The Queensland estimates exclude these.

Source: OESR and ABS 5220.0, 5249.0.

- Tourism's contribution to Queensland's GSP in 2003-04 of 5.8 per cent represents a slight decline from the revised estimate of 6.1 per cent for 1998-99. A similar decline was recorded for Australia, from 4.3 per cent in 1998-99 to 3.8 per cent in 2003-04. These declines occurred despite the introduction of the Goods and Services Tax (GST) during the intervening period, which would have had the effect of boosting tourism's GSP share. However, the decline also came after the events of 11 September 2001, which stifled tourism, especially international, for some time.
- The greatest proportion (79.6 per cent or 4.6 percentage points) of tourism GSP in 2003-04 was generated by tourists (visitors travelling for holiday, recreational purposes or to visit friends or relatives). The remainder was generated by business and other visitors (20.4 per cent or 1.2 percentage points) (Table 3).

Table 3: Tourism GSP by tourist and business/other visitors, Queensland, 2003-04

	Tourists(a) \$m	Business/ Other(b) \$m	Total \$m
Tourism expenditure	14,229	3,814	18,042
Tourism factor income	4,761	1,398	6,159
Tourism gross value added at basic prices	4,869	1,425	6,294
Tourism GSP	6,691	1,717	8,408
Queensland GSP			146,212
<i>Tourism contribution to GSP (per cent)</i>	<i>4.6</i>	<i>1.2</i>	<i>5.8</i>

(a) Includes visits for the purpose of holidays and visiting friends or relatives.

(b) Includes visits for the purpose of business, conferences, conventions, education, employment and other reasons.

Source: OESR and ABS 5220.0.

3 Queensland Tourism Total Factor Income and Gross Value Added

Main points

- Queensland total factor income was \$129.8 billion in 2003-04. Tourism's share of this was \$6.2 billion or 4.7 per cent (Table 4).
- Tourism is not classified as an industry in traditional national accounting terms. Tourism transactions are sales from standard ANZSIC industries (e.g. retail trade, air transport, etc.), to purchasers who are not in their usual domicile. Tourism sales are either a consumption or export activity³. Prior to 1998-99, this precluded a comparison of tourism's economic contribution to that of standard ANZSIC industries such as agriculture, construction and mining. However, the development of the satellite account framework now facilitates estimates of the contribution of tourism sales to the production of the standard industries, allowing such a comparison to be made.
- Using the factor income measure, tourism made a larger contribution to Queensland's factor income in 2003-04 than seven of the eighteen standard industries, with eleven standard industries contributing more than the tourism sector (Table 5).
- *Manufacturing* (10.6 per cent) and *Property and business services* (10.4 per cent) were the two biggest contributors. Tourism sits below *Mining* (6.4 per cent) but above *Agriculture, forestry and fishing* (4.4 per cent) (Table 5).
- An alternative measure of tourism contribution is industry gross value added at basic prices, which measures the value of production exclusive of product taxes such as GST. This is a better measure than GSP of the economic contribution of industries because it is free from distortions in prices caused by the introduction of new taxes over time. The tourism share of Queensland's total industry gross value added at basic prices was 4.7 per cent in 2003-04 (Table 4). The corresponding tourism share of gross value added for Australia was 3.4 per cent in 2003-04 (ABS 5249.0).
- The contribution of tourism to the Queensland economy over the period 1998-99 to 2003-04 was influenced by the introduction of GST in 2000-01. The introduction of GST resulted in a higher tourism contribution due to price increases as product taxes were levied on the service component of tourism expenditure for the first time in 2000-01. However, it should be noted that GST is paid by the visitors consuming the tourism service, not the industries selling the goods or services to the visitors.
- For day visitors and overnight intrastate visitors, *Retail trade* was the largest contributor to factor income. For overnight interstate visitors, the largest

³ For a more detailed explanation of the concept of tourism transactions, see Queensland Treasury, *Queensland Economic Review*, September Quarter 1991, "The Economic Measurement of Tourism in Queensland".

contributor was *Accommodation, cafes and restaurants*, whereas for international visitors, *Transport and storage* was the biggest contributor (Table 6).

- Tourism factor income was generated mainly by tourists (79.6 per cent), with business/other visits accounting for the other 20.4 per cent (Table 7).

Table 4: Shares of factor income, tourism and non-tourism, Queensland, 2003-04

Industry	Tourism	Non-Tourism	Total (a)	Tourism share
	\$m	\$m	\$m	%
Agriculture, forestry and fishing	79	5,674	5,752	1.4
Mining	2	8,358	8,360	0.0
Manufacturing	356	13,814	14,170	2.5
Electricity, gas and water supply	0	2,708	2,708	0.0
Construction	0	10,187	10,187	0.0
Wholesale trade	186	4,803	4,989	3.7
Retail trade	1,546	10,873	12,419	12.4
Accommodation, cafes and restaurants	1,668	2,335	4,003	41.7
Transport and storage	1,011	6,292	7,302	13.8
Communication services	69	3,597	3,666	1.9
Finance and insurance	21	6,412	6,433	0.3
Ownership of dwellings	457	10,057	10,514	4.3
Property and business services	110	13,459	13,569	0.8
Government administration and defence	17	6,568	6,585	0.3
Education	163	6,342	6,505	2.5
Health and community services	142	8,289	8,431	1.7
Cultural and recreational services	201	1,226	1,427	14.1
Personal and other services	132	2,645	2,777	4.7
Factor income (a)	6,159	123,638	129,797	4.7
Taxes less subsidies on production	135	2,631	2,765	4.9
Gross value added at basic prices (a)	6,294	126,268	132,562	4.7
Taxes less subsidies on products	2,114	11,534	13,648	15.5
Gross State Product (a)(b)	8,408	137,804	146,212	5.8

(a) May not sum to totals due to rounding.

(b) Includes statistical discrepancy.

Source: OESR and ABS 5220.0.

Table 5: Shares of factor income by industry, Queensland, 2003-04

Industry	Industry share of total factor income %	Tourism component of industry share %	Industry share of total factor income with tourism shown separately %
Manufacturing	10.9	0.3	10.6
Property and business services	10.5	0.1	10.4
Retail trade	9.6	1.2	8.4
Construction	7.8	0.0	7.8
Ownership of dwellings	8.1	0.4	7.7
Mining	6.4	0.0	6.4
Health and community services	6.5	0.1	6.4
Government administration and defence	5.1	0.0	5.1
Finance and insurance	5.0	0.0	4.9
Education	5.0	0.1	4.9
Transport and storage	5.6	0.8	4.8
Tourism			4.7
Agriculture, forestry and fishing	4.4	0.1	4.4
Wholesale trade	3.8	0.1	3.7
Communication services	2.8	0.1	2.8
Electricity, gas and water supply	2.1	0.0	2.1
Personal and other services	2.1	0.1	2.0
Accommodation, cafes and restaurants	3.1	1.3	1.8
Cultural and recreational services	1.1	0.2	0.9
Total (a)	100.0	4.7	100.0

(a) May not sum to totals due to rounding.
Source: OESR and ABS 5220.0.

Table 6: Tourism factor income by type of visitor, Queensland, 2003-04

Industry	Day Overnight		Overnight Interstate	Inter- national	Out- bound	Total Tourism (a)	Per cent
	visitors (a)	Intrastate (b)					
	\$m	\$m	\$m	\$m	\$m	\$m	
Agriculture, forestry and fishing	21	24	22	11	1	79	1.3
Mining	0	0	0	1	0	2	0.0
Manufacturing	72	117	100	66	1	356	5.8
Electricity, gas and water supply	0	0	0	0	0	0	0.0
Construction	0	0	0	0	0	0	0.0
Wholesale trade	50	57	45	33	1	186	3.0
Retail trade	335	473	506	223	7	1,546	25.1
Accommodation, cafes and restaurants	65	440	796	366	2	1,668	27.1
Transport and storage	74	198	257	378	103	1,011	16.4
Communication services	12	12	16	29	1	69	1.1
Finance and insurance	4	4	5	7	0	21	0.3
Ownership of dwellings	0	223	192	42	0	457	7.4
Property and business services	3	18	65	24	0	110	1.8
Government administration and defence	5	5	6	1	0	17	0.3
Education	11	9	10	133	0	163	2.6
Health and community services	38	40	50	12	2	142	2.3
Cultural and recreational services	35	40	100	26	0	201	3.3
Personal and other services	22	42	59	8	1	132	2.1
Tourism factor income (c)	747	1,704	2,230	1,360	119	6,159	100.0
Taxes less subsidies on production	18	40	47	27	3	135	
Tourism gross value added at basic prices (c)	765	1,743	2,277	1,387	122	6,294	
Taxes less subsidies on products	439	610	711	346	8	2,114	
Tourism Gross State Product (c)	1,204	2,353	2,988	1,733	130	8,408	

(a) Includes intrastate day visits and interstate day visits either to or from Queensland.

(b) Includes Queensland residents travelling interstate.

(c) May not sum to totals due to rounding.

Source: OESR and ABS 5220.0.

Table 7: Tourism factor income by broad purpose of visit, Queensland, 2003-04

Industry	Tourists \$m	Business/ Other \$m	Total Tourism(a) \$m
Agriculture, forestry and fishing	67	12	79
Mining	2	0	2
Manufacturing	311	45	356
Electricity, gas and water supply	0	0	0
Construction	0	0	0
Wholesale trade	158	28	186
Retail trade	1,269	276	1,546
Accommodation, cafes and restaurants	1,278	390	1,668
Transport and storage	749	262	1,011
Communication services	41	28	69
Finance and insurance	14	7	21
Ownership of dwellings	405	52	457
Property and business services	72	38	110
Government administration and defence	10	7	17
Education	55	108	163
Health and community services	85	57	142
Cultural and recreational services	187	15	201
Personal and other services	61	71	132
Tourism factor income (a)	4,761	1,398	6,159
Taxes less subsidies on production	107	27	135
Tourism gross value added at basic prices (a)	4,869	1,425	6,294
Taxes less subsidies on products	1,822	292	2,114
Tourism Gross State Product (a)	6,691	1,717	8,408

(a) May not sum to totals due to rounding.
Source: OESR and ABS 5220.0.

4 Employment

Main points

- In 2003-04, tourism employed 136,000 persons in Queensland. This represented 7.3 per cent of Queensland employment (Table 8 and Table 9).
- Of the 136,000 persons, 77,100 (56.7 per cent) were employed full-time and 58,900 (43.3 per cent) were employed part-time. This compares with the overall Queensland proportion of part-time employment of 28.7 per cent.
- In full-time equivalent terms⁴, tourism accounted for 106,500 full-time equivalent positions, which represented 6.7 per cent of all the full-time equivalent employment in Queensland (Table 8 and Table 11).

Table 8: Tourism employment by status, Queensland, 2003-04

	Full-time '000 persons	Part-time '000 persons	Total (a) '000 persons	Full-time equivalent '000 persons
Total tourism employment	77.1	58.9	136.0	106.5
Non-tourism employment	1,244.9	473.8	1,718.7	1,481.8
Total employment (a)	1,321.9	532.7	1,854.6	1,588.3
<i>Tourism share (per cent)</i>	<i>5.8</i>	<i>11.1</i>	<i>7.3</i>	<i>6.7</i>

(a) May not sum to totals due to rounding.
Source: OESR and ABS 6203.0.

- The estimate of tourism employment for 1998-99 has been revised, based on updated ABS data released since *The Contribution of International and Domestic Visitor Expenditure to the Queensland Regional Economies: 1998-99* was published in May 2002. The estimate of the number of persons employed in tourism in 1998-99 has been revised down from 151,300 to 137,700 persons. The estimate of the number of full-time equivalent positions attributed to tourism has also been revised down from 119,400 to 109,300.

⁴ Estimated by assuming two part-time positions equates to one full-time position.

- In 2003-04, there were 54,400 tourism positions in *Retail trade*, 39,700 in *Accommodation, cafes and restaurants* and 11,400 in *Transport and storage* (Table 9).
- In full-time equivalent terms in 2003-04, there were 40,700 tourism positions in *Retail trade*, 30,100 tourism positions in *Accommodation, cafes and restaurants* and 10,400 tourism positions in *Transport and storage* (Table 9 and Table 11).

Table 9: Tourism employment by industry, Queensland, 2003-04

Industry	Full-time	Part-time	Total (b)	Full-time	Tourism
	'000 persons	'000 persons	'000 persons	equivalent '000 persons	ratio(a) %
Agriculture, forestry and fishing	0.9	0.3	1.3	1.1	1.4
Mining	0.0	0.0	0.0	0.0	0.0
Manufacturing	3.9	1.0	4.9	4.4	2.5
Electricity, gas and water supply	0.0	0.0	0.0	0.0	0.0
Construction	0.0	0.0	0.0	0.0	0.0
Wholesale trade	2.6	0.5	3.1	2.9	3.7
Retail trade	27.0	27.4	54.4	40.7	17.9
Accommodation, cafes and restaurants	20.5	19.1	39.7	30.1	41.7
Transport and storage	9.4	2.0	11.4	10.4	12.2
Communication services	0.5	0.1	0.6	0.5	1.9
Finance and insurance	0.1	0.0	0.1	0.1	0.2
Property and business services	0.8	0.4	1.3	1.1	0.6
Government administration and defence	0.2	0.1	0.3	0.3	0.3
Education	2.0	1.3	3.3	2.7	2.5
Health and community services	1.6	1.0	2.5	2.0	1.4
Cultural and recreational services	3.7	3.3	7.0	5.3	14.7
Personal and other services	3.8	2.3	6.1	4.9	8.0
Total (b)	77.1	58.9	136.0	106.5	6.7

(a) Tourism employment as a proportion of total employment in each industry. The ratio is based on full-time equivalent estimates.

(b) May not sum to totals due to rounding.

Source: OESR and ABS 6203.0.

- The interstate overnight sector was the largest tourism employer, accounting for 50,700 positions (37.3 per cent). The intrastate overnight sector accounted for 36,200 persons (26.6 per cent) while the international visitor sector accounted for the employment of 27,400 persons (20.1 per cent) (Table 10).

Table 10: Tourism employment by industry by type of visitor, Queensland, 2003-04
(total number of persons employed)

Industry	Overnight					Total Tourism (c)
	Day visitors(a)	Intrastate (b)	Overnight Interstate	Inter- national	Out- bound	
	'000 persons	'000 persons	'000 persons	'000 persons	'000 persons	
Agriculture, forestry and fishing	0.3	0.4	0.4	0.2	0.0	1.3
Mining	0.0	0.0	0.0	0.0	0.0	0.0
Manufacturing	1.1	1.5	1.3	1.0	0.0	4.9
Electricity, gas and water supply	0.0	0.0	0.0	0.0	0.0	0.0
Construction	0.0	0.0	0.0	0.0	0.0	0.0
Wholesale trade	0.8	1.0	0.8	0.5	0.0	3.1
Retail trade	11.8	15.9	18.3	8.1	0.3	54.4
Accommodation, cafes and restaurants	1.5	10.5	18.9	8.7	0.0	39.7
Transport and storage	1.0	2.5	2.9	4.0	1.1	11.4
Communication services	0.1	0.1	0.1	0.2	0.0	0.6
Finance and insurance	0.0	0.0	0.0	0.1	0.0	0.1
Property and business services	0.0	0.3	0.7	0.2	0.0	1.3
Government administration and defence	0.1	0.1	0.1	0.0	0.0	0.3
Education	0.2	0.2	0.2	2.7	0.0	3.3
Health and community services	0.7	0.7	0.9	0.2	0.0	2.5
Cultural and recreational services	1.2	1.4	3.4	0.9	0.0	7.0
Personal and other services	1.3	1.7	2.6	0.5	0.1	6.1
Total (c)	20.2	36.2	50.7	27.4	1.5	136.0
<i>Per cent of total</i>	<i>14.9</i>	<i>26.6</i>	<i>37.3</i>	<i>20.1</i>	<i>1.1</i>	<i>100.0</i>

(a) Includes employment in Queensland generated by intrastate day visits and interstate day visits either to or from Queensland.

(b) Includes employment generated in Queensland by Queensland residents travelling interstate.

(c) May not sum to totals due to rounding.

Source: OESR and ABS 6203.0.

- In full-time equivalent terms, the interstate overnight visitor sector accounted for 39,300 tourism positions (36.9 per cent), while the intrastate overnight sector accounted for 28,300 positions (26.6 per cent). The international visitor sector accounted for 21,800 tourism positions (20.4 per cent) and the day-visitor sector accounted for 15,800 (14.8 per cent) (Table 11).

Table 11: Tourism full-time equivalent^(a) employment by industry and type of visitor, Queensland, 2003-04

Industry	Day	Overnight		Inter-national	Out-bound	Total Tourism (d)
	visitors	Intrastate	Overnight			
	(b)	(c)	Interstate			
	'000	'000	'000	'000	'000	'000
	persons	persons	persons	persons	persons	persons
Agriculture, forestry and fishing	0.3	0.3	0.3	0.2	0.0	1.1
Mining	0.0	0.0	0.0	0.0	0.0	0.0
Manufacturing	0.9	1.4	1.2	0.9	0.0	4.4
Electricity, gas and water supply	0.0	0.0	0.0	0.0	0.0	0.0
Construction	0.0	0.0	0.0	0.0	0.0	0.0
Wholesale trade	0.8	0.9	0.7	0.5	0.0	2.9
Retail trade	8.8	11.9	13.7	6.1	0.2	40.7
Accommodation, cafes and restaurants	1.2	7.9	14.4	6.6	0.0	30.1
Transport and storage	0.9	2.2	2.7	3.6	1.0	10.4
Communication services	0.1	0.1	0.1	0.2	0.0	0.5
Finance and insurance	0.0	0.0	0.0	0.0	0.0	0.1
Property and business services	0.0	0.3	0.6	0.2	0.0	1.1
Government administration and defence	0.1	0.1	0.1	0.0	0.0	0.3
Education	0.2	0.1	0.2	2.2	0.0	2.7
Health and community services	0.5	0.6	0.7	0.2	0.0	2.0
Cultural and recreational services	0.9	1.1	2.6	0.7	0.0	5.3
Personal and other services	1.0	1.4	2.1	0.4	0.0	4.9
Total (d)	15.8	28.3	39.3	21.8	1.3	106.5
<i>Per cent of total</i>	<i>14.8</i>	<i>26.6</i>	<i>36.9</i>	<i>20.4</i>	<i>1.3</i>	<i>100.0</i>

(a) Estimated by assuming two part-time positions equate to one full-time position.

(b) Includes employment in Queensland generated by intrastate day visits and interstate day visits either to or from Queensland.

(c) Includes employment generated in Queensland by Queensland residents travelling interstate.

(d) May not sum to totals due to rounding.

Source: OESR and ABS 6203.0.

- Around eight out of ten full-time equivalent tourism positions were due to expenditure by tourists, while the remainder were from visitors travelling for business or other reasons (Table 12).

Table 12: Tourism employment by industry and broad purpose of visit, Queensland, 2003-04

Industry	Total persons employed			Full-time equivalent		
	Tourists	Business /Other	Total	Tourists	Business /Other	Total
			(a)			(a)
'000 persons	'000 persons	'000 persons	'000 persons	'000 persons	'000 persons	
Agriculture, forestry and fishing	1.1	0.2	1.3	0.9	0.2	1.1
Mining	0.0	0.0	0.0	0.0	0.0	0.0
Manufacturing	4.3	0.6	4.9	3.8	0.6	4.4
Electricity, gas and water supply	0.0	0.0	0.0	0.0	0.0	0.0
Construction	0.0	0.0	0.0	0.0	0.0	0.0
Wholesale trade	2.6	0.5	3.1	2.4	0.4	2.9
Retail trade	45.5	9.0	54.4	34.0	6.7	40.7
Accommodation, cafes and restaurants	30.4	9.3	39.7	23.1	7.0	30.1
Transport and storage	8.2	3.2	11.4	7.5	3.0	10.4
Communication services	0.3	0.2	0.6	0.3	0.2	0.5
Finance and insurance	0.1	0.0	0.1	0.1	0.0	0.1
Property and business services	0.5	0.7	1.3	0.5	0.6	1.1
Government administration and defence	0.2	0.1	0.3	0.2	0.1	0.3
Education	1.1	2.2	3.3	0.9	1.8	2.7
Health and community services	1.5	1.0	2.5	1.2	0.8	2.0
Cultural and recreational services	6.4	0.5	7.0	4.9	0.4	5.3
Personal and other services	3.8	2.3	6.1	3.0	1.9	4.9
Total (a)	106.0	30.0	136.0	82.7	23.8	106.5
<i>Per cent of total</i>	<i>77.9</i>	<i>22.1</i>	<i>100.0</i>	<i>77.7</i>	<i>22.3</i>	<i>100.0</i>

(a) May not sum to totals due to rounding.
Source: OESR and ABS 6203.0.

5 Expenditure

Main points

- Total tourism expenditure in Queensland in 2003-04 amounted to \$18.0 billion. A breakdown of this expenditure as sourced from the Tourism Research Australia surveys, together with the various imputed transactions, is presented in Table 13.

Table 13: Visitor expenditure by visitor origin, Queensland, 2003-04

	Day visits (domestic)	Overnight visits (domestic)	Overnight visits (inter- national)	Total (a)	Share of total
	\$m	\$m	\$m	\$m	%
Intrastate					
Visitor expenditure	2,468	4,543			
Imputed expenditure	29	364			
Total	2,497	4,907		7,404	41.0
Interstate					
Visitor expenditure	129	5,941			
Imputed expenditure		279			
Total	129	6,220		6,349	35.2
International					
Visitor expenditure			3,076		
Imputed expenditure			129		
Earnings by Australian carriers overseas (Queensland share)			583		
Total			3,788	3,788	21.0
Sub-total of visitors to/within Queensland (a)	2,626	11,127	3,788	17,541	97.2
Before/after expenditure of Queensland residents travelling interstate and overseas	11	117	372	501	2.8
Total (a)	2,638	11,244	4,160	18,042	100.0

(a) May not sum to totals due to rounding.
Source: OESR estimates.

- By broad category, the four largest types of expenditure were *accommodation, food and drink* with \$6.7 billion or 36.9 per cent, *shopping* with \$2.8 billion or 15.7 per cent, *airfares* with \$2.2 billion or 12.3 per cent and *fuel* with \$1.4 billion or 7.9 per cent (Table 14).
- Expenditure by overnight interstate visitors accounted for \$6.2 billion (34.5 per cent). This was followed by \$5.0 billion (27.8 per cent) by overnight intrastate visitors and \$3.8 billion (21.0 per cent) by international visitors (Table 14).

Table 14: Visitor expenditure in Queensland by expenditure items, 2003-04

Expenditure item	Day Overnight		Inter- national	Out- bound	Total Tourism	Per cent	
	visitors (a)	Intrastate (b) Interstate					
	\$m	\$m	\$m	\$m	\$m		
Accommodation, food and drink	549	1,810	2,915	1,363	15	6,653	36.9
Airfares	186	548	545	690	254	2,224	12.3
Other transport costs	29	68	91	145	2	334	1.9
Organised tours	13	22	108	269	0	413	2.3
Car hire costs	8	35	198	86	0	326	1.8
Conference fees	5	56	64	0	0	125	0.7
Entertainment	134	154	422	103	0	812	4.5
Gambling	28	32	24	18	0	101	0.6
Education, course fees	5	2	2	176	0	186	1.0
Fuel	547	531	302	50	0	1,431	7.9
Groceries for self-catering	140	410	342	32	0	924	5.1
Shopping	780	724	652	666	17	2,839	15.7
Rent (d)	0	299	257	56	0	613	3.4
Other expenditure	213	331	298	136	84	1,061	5.9
Total (c)	2,638	5,024	6,220	3,788	372	18,042	100.0
<i>Per cent of total</i>	<i>14.6</i>	<i>27.8</i>	<i>34.5</i>	<i>21.0</i>	<i>2.1</i>	<i>100.0</i>	

(a) Includes expenditure in Queensland by intrastate and interstate day visitors both to and from Queensland.

(b) Includes expenditure in Queensland by Queensland residents travelling interstate.

(c) May not sum to totals due to rounding.

(d) Actual and imputed rent on holiday houses.

Source: OESR and TRA IVS and NVS.

Appendix: Outline of the Methodology

Step 1: Visitor expenditure estimates

Visitor expenditure estimates for 2003-04 were obtained from the TRA's IVS and NVS unit record files. Some additional data, especially those relating to imputed values, were obtained either directly from the ABS or from their publications. An initial problem was that not all expenditure by visitors to a region occurred in that region. The TRA collects information on expenditure (a) paid before/after the trip, (b) paid during the trip, and (c) paid for by an employee or someone else. For example, the majority of the amount paid beforehand by an interstate visitor for accommodation in Queensland will flow through to Queensland, but the amount paid beforehand for things like groceries, taxis or gifts will not.

Step 2: Mapping from expenditure categories to input-output industries

Once the level of expenditure in Queensland was determined, the expenditure was converted from expenditure by item (e.g. expenditure on taxis) to expenditure by input-output commodities (e.g. code 6401 *Road transport*). This presented significant problems. The two areas of greatest concern were the allocation of package expenditure (i.e. a package that could cover airfares, accommodation, meals tours, etc.), and the allocation of shopping expenditure.

Step 3: Convert expenditure from purchaser prices to basic values

The expenditure had to be converted to basic values before being applied to the input-output tables. This involved deducting product taxes and the re-allocation of the various margins (i.e. retail, wholesale and transport margins) to the correct industries. The margins tables in the ABS *Australian National Accounts: Input-Output Tables – Electronic Publication, Australia 1998-99*⁵ Cat. no. 5209.0.55.001 were used. This assumes that the margin relationships in Queensland are similar to those of Australia as a whole and that the Australian relationships did not change significantly over the period 1998-99 to 2003-04, apart from the impact of the introduction of the Goods and Services Tax (GST) in 2000-01.

Step 4: Update the State 1996-97 input-output tables to 2003-04

The next step involved the updating of the necessary part of the Queensland input-output tables to derive a tourism satellite account for Queensland for 2003-04. The latest published Queensland tables are for 1996-97 whereas the year chosen for this study was 2003-04. The disaggregated 106 industry tables were used throughout this study. However, given the standard errors that would exist at such a level, the results are presented at the normal aggregated level.

The factor income, production and import values in the 1996-97 Queensland tables were updated to 2003-04 with reference to a range of ABS and non-ABS data. In particular, the factor income and aggregate taxes less subsidies data were updated from the ABS *Australian National Accounts: State Accounts*, Cat. no. 5220.0 and OESR Queensland State Accounts. The employment estimates were updated with reference to the ABS labour force surveys.

⁵ At the time of compilation, these were the latest published input-output tables.

Step 5: Data confrontation

A number of external sources were used to test the initial results. Various ABS surveys and publications were used, particularly the household expenditure surveys, the Australian input-output tables, and the various industry surveys of accommodation, clubs, pubs, taverns and bars, travel agencies, cafes and restaurants, etc.

Step 6: Establish tourism sales ratio

The tourism sales ratio was then estimated. This is the ratio of the level of tourism expenditure at basic values to total Queensland production. This was done for each of the 106 industries in the disaggregated tables and for each of the visitor segments, i.e. day visitors, interstate visitors, etc. by purpose of visit.

Step 7: Use tourism sales ratio to proportion industry output, GSP and employment

The tourism sales ratio was then used to allocate to tourism, and the various visitor sectors, shares of GSP and employment. The assumption is that the structure within an industry is the same for the tourism and the non-tourism components.

Step 8: Format GSP measures, employment measures, etc

By this stage there were available tourism measures for factor income, taxes less subsidies on production, gross value added at basic prices, taxes less subsidies on products and employment levels for the various tourism sectors and visitor types. These were then assembled to produce the various tables and measures as shown in this report.

Glossary

- Factor income.....consists of compensation of employees, gross operating surplus and gross mixed income. It is equivalent to GDP/GSP less net taxes on products and production.
- Full-time employment.....employment that involves at least 35 hours per week.
- Full-time equivalent (FTE)....employment level estimate that assumes that two part-time positions equate to a full-time position.
- Gross domestic product.....the total market value of goods and services produced in a country in a given period after deducting the cost of goods and services used up in the process of production but before deducting allowances for the consumption of fixed capital.
- Gross state product.....as per GDP above, but for states, not the entire country.
- Gross value added.....the value of output at basic prices minus the value of intermediate consumption at purchasers' prices. The term is used to describe gross product by industry and by sector. Basic prices valuation of output removes the distortion caused by variations in the incidence of commodity taxes and subsidies across the output of individual industries.
- Inbound visitorinternational visitor to Queensland.
- Input-output tablea system of economic accounts which shows, in value terms, the supply and disposal of goods and services produced within an economy over one year.
- Margins.....the difference between the sale price of a good and the cost of purchase of the good being sold. It is composed of net taxes on products and margins such as transport, wholesale and retail.
- Outbound visitor.....Queensland resident travelling overseas.
- Part-time employment.....employment that involves less than 35 hours per week.
- Sales ratiothe proportion of an individual industry output that is sold to the tourism sector.
- Subsidies on production..... consists of all subsidies, except subsidies on products, which resident enterprises may receive as a consequence on engaging in production. An example of a subsidy on production is the Australian Government subsidy provided to assist in meeting the cost of navigational services at smaller airports.
- Subsidies on products..... subsidies payable per unit of a good or service. The subsidy may be a specific amount of money per unit

of quantity of good or service or may be a specific percentage of the price per unit. An example of a subsidy on products is the Queensland Fuel Subsidy Scheme.

Taxes on production..... consists of net taxes (taxes less subsidies) that enterprises incur as a result of engaging in production except net taxes on products. Examples of taxes on production include payroll taxes, land taxes and local government rates.

Taxes on products..... are the net taxes that are payable per unit of output of some goods or services. These taxes are paid by the users of the products and examples include goods and services tax, excise taxes and taxes on gambling.

Tourist as for visitor below, but with the restriction that the purpose of the visit must be for leisure, recreation and holiday purposes or for the purpose of visiting friends and/or relatives.

Visitor..... any person travelling to a place other than that of his/her usual domicile for less than twelve months. This includes all visitors regardless of the purpose of their visit.

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