

Tourism satellite account: 2018

The contribution made by tourism to the New Zealand economy





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Citation

Stats NZ (2018). Tourism satellite account: 2018. Retrieved from www.stats.govt.nz.

ISSN 1177-6226

Published in December 2018 by

Stats NZ Tatauranga Aotearoa Wellington, New Zealand

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About the tourism satellite account

Purpose

Tourism satellite account: 2018 provides a picture of the role tourism plays in New Zealand, with information on the changing levels and impact of tourism activity. It presents information on tourism's contribution to the New Zealand economy in terms of expenditure and employment. Results cover provisional figures for the year ended March 2018 and detailed results for 2017.

We develop and publish the tourism satellite account, using a United Nations World Tourism Organization framework, with funding from the Ministry of Business, Innovation and Employment. The tourism satellite account is part of a core set of tourism data that provides base information for understanding and monitoring tourism activity in New Zealand. Other elements of the core dataset include a survey of spending by international visitors, regional tourism expenditure estimates, visitor arrival and accommodation statistics, and forecasts of international tourist numbers and expenditure.

What is a tourism satellite account?

A tourism satellite account integrates data about the supply and use of tourism-related goods and services into a single format. It summarises the contribution tourism makes to production and employment, and is consistent and integrated with New Zealand's official national accounts. This ensures that the importance of the tourism sector is measured and understood in the context of the New Zealand economy as a whole. New Zealand's tourism satellite account (TSA) measures expenditure in New Zealand by both resident and non-resident tourists, and thus gives a picture of the overall size of the tourism industry, including its contribution to gross domestic product (GDP) and employment.

Tourism, unlike 'conventional' industries, such as agriculture or manufacturing, which are classified according to the goods and services they produce, is defined by the characteristics of the customer demanding tourism products. Tourism products can cut across standard industry definitions, and therefore require a different approach.

Satellite accounts are an extension of the core national accounts, and involve rearranging existing information in the national accounts so that an area of particular economic or social importance can be analysed more closely. As extensions of the core system of national accounts, satellite accounts are an important recommendation of the international standard, the *System of National Accounts* 2008 (Inter-Secretariat Working Group on National Accounts, 2008).

We present both final and provisional estimates in *Tourism satellite account: 2018*. The supply and use framework provides a detailed picture of the economy broken down by industry, product, primary input, and final demand categories. It is the starting point for deriving final accounts. To give a more timely picture of the impact of tourism, we prepare provisional TSAs, using fewer data sources than final year estimates. The provisional estimates are presented in a less detailed format, and are revised as relevant data sources become available. As balanced supply and use tables are completed for the relevant years (as part of the ongoing production of the New Zealand System of National Accounts), we replace provisional results with final year estimates.

Tourism satellite account: 2018 presents results for the year ended March 2018 at the aggregated provisional estimate level in current prices.

Detailed tables, year ended March 2017 contains results for the latest final account year.

Value added

Value added is the 'value' businesses add to the goods and services they purchase (intermediate inputs) and use in producing their own outputs. The measurement of tourism's direct value added, also known as tourism's direct contribution to GDP, is the major focus of the TSA. As direct value added for tourism is measured on the same basis as that used for industries in the national accounts, it enables a consistent comparison between the tourism industry's contribution to GDP and that of more traditional industries such as agriculture and construction.

Direct value added does not measure the full impact of tourism on the New Zealand economy because it is limited to businesses that have a direct relationship with tourists. Additional value added comes from tourism through producing the intermediate inputs used in producing goods and services sold to tourists, although there is no direct relationship between the producer of the intermediate inputs and the tourist. This additional value added is known as indirect value added.

Summary results

Tourism plays a significant role in the New Zealand economy in terms of producing goods and services and creating employment opportunities. Tourism expenditure includes spending by all travellers, whether they are international, resident householders, or business and government travellers. International tourism expenditure includes spending by foreign students studying in New Zealand for less than 12 months.

Key provisional estimates

Key provisional estimates for the year ended March 2018:

- Total tourism expenditure was \$39.1 billion, an increase of 7.7 percent (\$2.8 billion) from the previous year.
- International tourism expenditure increased 9.6 percent (\$1.4 billion) to \$16.2 billion, and contributed 20.6 percent to New Zealand's total exports of goods and services.
- Domestic tourism expenditure increased 6.5 percent (\$1.4 billion) to \$23.0 billion.
- Tourism generated a direct contribution to GDP of \$15.9 billion, or 6.1 percent of GDP.
- The indirect value added of industries supporting tourism generated an additional \$11.1 billion, or 4.3 percent of GDP.
- 216,012 people were directly employed in tourism (8.0 percent of the total number of people employed in New Zealand), an increase of 2.6 percent from the previous year.
- Tourists generated \$3.7 billion in goods and services tax (GST) revenue, with \$1.7 billion coming from international tourists.
- Overseas visitor arrivals to New Zealand increased 7.8 percent.

Revisions

The *Tourism satellite account: 2018* includes revisions made to the derivation of both the domestic and international tourism expenditure series. These revisions have caused changes to the value of tourism expenditure in the New Zealand economy, and affected the official TSA time series back to 1999.

Revisions to the expenditure series include:

- the incorporation of updated living cost ratios (from 2013) and changes to export education levy data used to derive international student expenditure
- updated cruise expenditure estimates including the combined impact of revised traveller by port statistics, changes to existing expenditure sources, and the incorporation of additional data providers
- the GST paid on purchases by tourists stemming from further refinements to the work undertaken in 2017 to improve the way GST is allocated to tourism-related goods and services
- the incorporation of 2013 input-output tables used in the derivation of indirect value added and imports used in the production of goods and services sold to tourists, with a flow-on impact to indirect tourism employment calculations
- methodological refinements to the Household Tourism Expenditure Estimates (HTEE) data sources, including the incorporation of 2017 Annual Enterprise Survey (AES) data
- 2017 methodological improvements to national accounts and nominal GDP statistics.

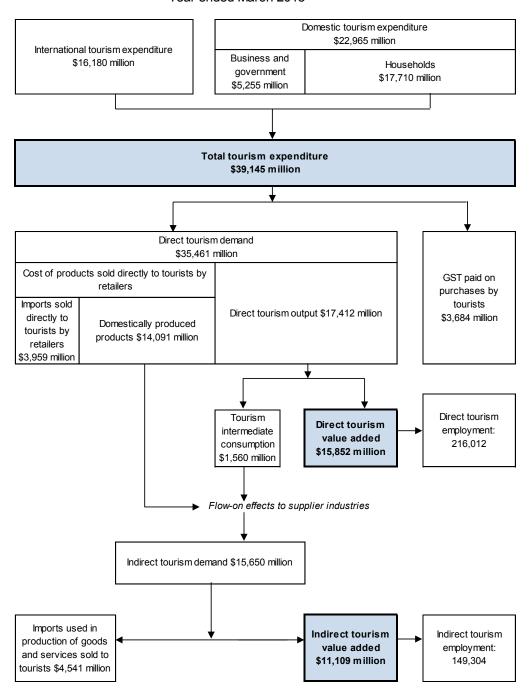
Tourism industry ratios have changed because of these revisions. These ratios are the proportion of an industry's output that is consumed by tourists and are used to calculate value added and tourism employment estimates. As a result of the ratio changes, we revised the value added time series back to 1999. Together with the ratio changes, we revised the tourism employment time series back to 2000.

<u>Figure 1</u> traces the flows of tourism expenditure through the New Zealand economy for the year ended March 2018. It shows the value tourism adds to the New Zealand economy, both directly and indirectly, the GST received by government, the imports of goods and services, and direct and indirect employment.

Figure 1

Flows of tourism expenditure through the New Zealand economy⁽¹⁾⁽²⁾

Year ended March 2018



- 1. Totals may not add to the stated totals, due to rounding.
- 2. Tourism expenditure is measured in purchaser prices. Other monetary aggregates are measured in producer prices.

Key results by topic for the year ended March 2018

Tourism expenditure

Total tourism expenditure increased 7.7 percent to \$39.1 billion, following an increase of 2.5 percent in the March 2017 year.

Tourism expenditure generated \$15.9 billion of direct value added, representing a 6.1 percent contribution to GDP. A further \$11.1 billion of indirect value added activity was recorded (see table 1).

Table 1

Tourism expenditure by component⁽¹⁾

Year ended March 1999–2018

				GST paid			Value added as a percentage of total industry contribution to GDP			
Year ended March	Direct tourism value added	Indirect tourism value added ⁽²⁾	Imports sold to tourists ⁽³⁾	GST paid on purchases by tourists	Total tourism expenditure	Direct tourism value added	Indirect tourism value added	Total tourism value added		
			\$(million)	L			Percent			
	•				•					
1999	5,197	4,277	4,846	1,173	15,494	5.2	4.3	9.5		
2000	5,755	4,713	5,782	1,293	17,542	5.5	4.5	9.9		
2001	6,013	5,454	5,932	1,437	18,836	5.4	4.9	10.3		
2002	6,562	5,670	6,411	1,549	20,192	5.5	4.7	10.2		
2003	7,548	5,699	6,782	1,667	21,696	6.0	4.5	10.5		
2004	8,059	5,747	6,480	1,719	22,006	6.0	4.3	10.3		
2005	8,558	5,905	6,422	1,825	22,710	6.0	4.1	10.1		
2006	8,929	6,166	6,427	1,920	23,442	5.9	4.1	10.0		
2007	9,288	6,556	6,913	2,013	24,769	5.8	4.1	10.0		
2008	9,936	7,035	6,880	2,071	25,922	5.8	4.1	9.8		
2009	9,279	6,528	8,561	2,120	26,488	5.3	3.7	9.0		
2010	9,582	6,769	7,191	2,071	25,613	5.3	3.8	9.1		
2011	9,756	6,833	7,310	2,248	26,147	5.2	3.6	8.9		
2012	10,085	7,063	7,165	2,456	26,768	5.2	3.6	8.8		
2013	10,329	7,234	7,197	2,483	27,242	5.2	3.6	8.8		
2014	10,953	7,687	7,347	2,617	28,605	5.1	3.6	8.7		
2015	12,664	8,828	7,527	2,921	31,940	5.7	4.0	9.7		
2016	14,443	10,078	7,615	3,315	35,451	6.2	4.3	10.5		
2017	14,698	10,300	7,924	3,409	36,331	6.0	4.2	10.1		
2018P	15,852	11,109	8,500	3,684	39,145	6.1	4.3	10.4		

^{1.} Individual figures may not sum to stated totals due to rounding.

Note: Figures for all years prior to 2018 have been revised.

Symbol:

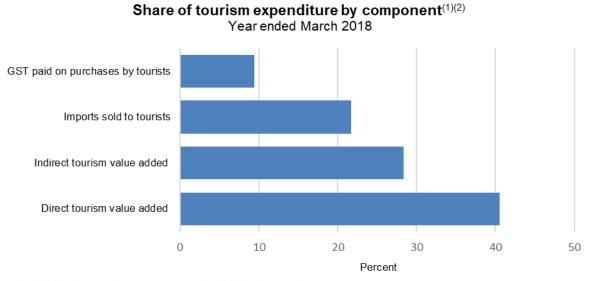
P provisional

^{2.} Results from input-output tables for 2013 have been used in the calculation of indirect tourism value added.

^{3.} Imports used in production of goods and services sold to tourists; imports sold directly to tourists by retailers.

Direct and indirect tourism value added, when combined, accounted for 69 cents for every dollar spent by tourists, while GST accounted for 9 cents for every dollar spent by tourists. The remainder represents imports (see figure 2).

Figure 2



1. Individual percentages may not sum to 100 due to rounding.

Imports sold to tourists comprises imports used in production of goods and services sold to tourists and imports sold directly to tourists by retailers.

Stats NZ

Tourism expenditure by type of tourist

International tourism expenditure increased 9.6 percent, following a 0.5 percent decrease in the March 2017 year. Domestic tourism expenditure increased 6.5 percent, following a 4.7 percent increase in the previous year (see figure 3 and table 2).

Figure 3

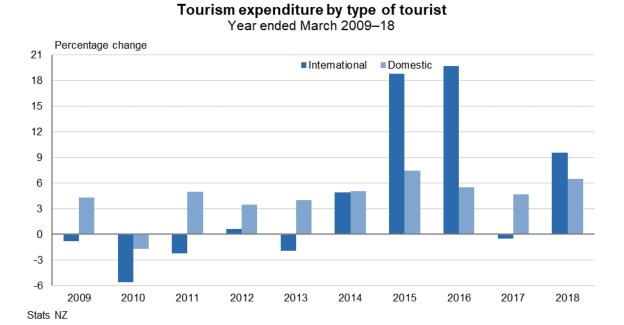


Table 2

Tourism expenditure by type of tourist⁽¹⁾

Year ended March 1999–2018

Year ended March	Internation expen	nal tourism nditure	Domestic tourism expenditure		Total tourism	expenditure	Total exports of goods and services	International tourism as a percentage of total exports
		Annual	A 7 \	Annual		Annual	*/ "	
	\$(million)	percentage	\$(million)	percentage	\$(million)	percentage	\$(million)	Percent
		change	change			change		
1999	5,999		9,495 R		15,494 R		31,639	19.0
2000	7,122	18.7	10,421 R	9.8 R	17,542 R	13.2 R	35,045	20.3
2001	8,169	14.7	10,667 R	2.4 R	18,836 R	7.4 R	42,837	19.1
2002	8,989	10.0	11,203 R	5.0 R	20,192 R	7.2 R	45,604	19.7
2003	9,494	5.6	12,202 R	8.9 R	21,696 R	7.4 R	44,403	21.4
2004	9,603	1.1	12,403 R	1.6 R	22,006 R	1.4 R	43,119	22.3
2005	9,987	4.0	12,723 R	2.6 R	22,710 R	3.2 R	45,662	21.9
2006	10,065	0.8	13,376 R	5.1 R	23,442 R	3.2 R	46,087	21.8
2007	10,676 R	6.1 R	14,093 R	5.4 R	24,769 R	5.7 R	50,928	21.0 R
2008	11,010 R	3.1 R	14,913 R	5.8 R	25,922 R	4.7 R	54,645	20.1 R
2009	10,927 R	-0.8 R	15,561 R	4.3 R	26,488 R	2.2 R	60,759	18.0 R
2010	10,316 R	-5.6 R	15,297 R	-1.7 R	25,613 R	-3.3 R	55,832	18.5 R
2011	10,090 R	-2.2 R	16,057 R	5.0 R	26,147 R	2.1 R	61,559	16.4 R
2012	10,151 R	0.6 R	16,617 R	3.5 R	26,768 R	2.4 R	64,749	15.7 R
2013	9,958 R	-1.9 R	17,285 R	4.0 R	27,242 R	1.8 R	62,766	15.9 R
2014	10,444 R	4.9 R	18,161 R	5.1 R	28,605 R	5.0 R	67,076 R	15.6 R
2015	12,409 R	18.8 R	19,531 R	7.5 R	31,940 R	11.7 R	67,845 R	18.3 R
2016	14,848 R	19.7 R	20,603 R	5.5 R	35,451 R	11.0 R	70,782 R	21.0 R
2017	14,769 R	-0.5 R	21,562 R	4.7 R	36,331 R	2.5 R	71,349 R	20.7 R
2018P	16,180	9.6	22,965	6.5	39,145	7.7	78,605	20.6

^{1.} Individual figures may not sum to stated totals due to rounding.

Symbols:

P provisional

R revised

... not applicable

Exports

International tourism continues to be a significant export earner for New Zealand, compared with other traditional export products (see table 3 and figure 4).

In the year ended March 2018, international tourism's contribution to total exports was \$16.2 billion (20.6 percent of exports). The export receipts from dairy products, including casein, totalled \$15.1 billion (19.2 percent of exports).

Note that international tourism is compared with selected primary exports.

Table 3
International tourism expenditure compared with selected primary exports⁽¹⁾
Year ended March 1999–2018

			Selecte	d export		
Year ended March	International tourism	Dairy products, including casein	Meat and meat products	Wood and wood products	Fruit	Crude oil
			\$(m	illion)		
1999	5,999	4,703	2,843	2,348	909	347
2000	7,122	4,460	3,198	2,950	1,059	442
2001	8,169	6,167	3,854	3,635	1,074	669
2002	8,989	7,491	4,414	3,536	1,051	609
2003	9,494	5,919	4,242	3,653	1,054	467
2004	9,603	5,707	4,232	3,076	1,047	320
2005	9,987	5,678	4,688	3,203	1,356	378
2006	10,065	5,884	4,411	3,116	1,181	495
2007	10,676 R	7,332	4,813	3,497	1,191	404
2008	11,010 R	9,277	4,416	3,406	1,298	1,840
2009	10,927 R	9,975	5,432	3,472	1,497	2,450
2010	10,316 R	8,972	4,997	3,605	1,586	1,996
2011	10,090 R	11,576	5,199	4,413	1,446	1,976
2012	10,151 R	12,704	5,389	4,327	1,583	2,101
2013	9,958 R	12,349	5,279	4,385	1,568	1,766
2014	10,444 R	15,896	5,492	5,154	1,548	1,364
2015	12,409 R	14,168	6,194	4,633	1,758	1,198
2016	14,848 R	12,346	6,580	4,855	2,362	653
2017	14,769 R	12,374	5,983	5,315	2,758	688
2018P	16,180	15,078	6,797	6,144	2,648	561

^{1.} Exports are valued fob (free on board – the value of goods at New Zealand ports before export) and include re-exports.

Symbols:

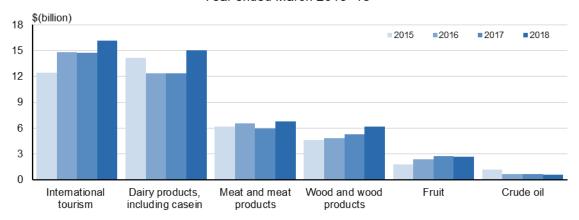
Pprovisional

R revised

Figure 4

International tourism expenditure compared with selected primary exports(1)

Year ended March 2015-18



1. Exports are valued fob (free on board - the value of goods at New Zealand ports before export) and include re-exports. Stats NZ

International student expenditure – studying less than 12 months

Included in international tourism expenditure is the component of international students studying in New Zealand for less than 12 months (consistent with the definition of a tourist). Expenditure by international students studying for less than 12 months comprises course fees, living costs, and airfares on resident airlines.

In the year ended March 2018, expenditure reached \$3.4 billion, an increase of 10.3 percent (see figure 5 and table 4). The number of short-term arrivals for education purposes (studying for less than 12 months) totalled 67,104, up 1.8 percent (see table 8).

Note that the calculation of international students' expenditure when studying less than 12 months differs from the calculation of education exports derived from balance of payments data, reflecting conceptual differences.

Figure 5

International student expenditure – studying less than 12 months and international tourism expenditure

Year ended March 2015-18

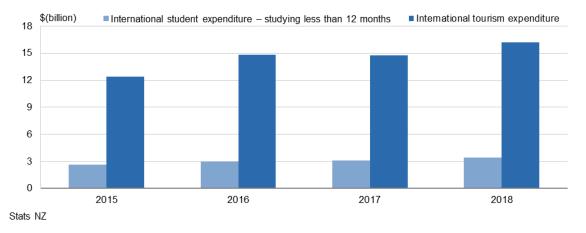


Table 4
International student expenditure – studying less than 12 months
Year ended March 1999–2018

Year			ent expenditure nan 12 months	International tourism expenditure			
ended March	\$(million)		Annual percentage change		\$(million)		Annual percentage change
1999	294	R			5,999		
2000	327	R	11.2	R	7,122		18.7
2001	452	R	38.2	R	8,169		14.7
2002	797	R	76.3	R	8,989		10.0
2003	1,156	R	45.0	R	9,494		5.6
2004	1,587	R	37.3	R	9,603		1.1
2005	1,796	R	13.2	R	9,987		4.0
2006	1,840	R	2.4	R	10,065		0.8
2007	1,822	R	-1.0	R	10,676	R	6.1 R
2008	1,864	R	2.3	R	11,010	R	3.1 R
2009	1,881	R	0.9	R	10,927	R	-0.8 R
2010	2,008	R	6.8	R	10,316	R	-5.6 R
2011	2,058	R	2.5	R	10,090	R	-2.2 R
2012	2,050	R	-0.4	R	10,151	R	0.6 R
2013	2,060	R	0.5	R	9,958	R	-1.9 R
2014	2,273	R	10.3	R	10,444	R	4.9 R
2015	2,659	R	17.0	R	12,409	R	18.8 R
2016	2,956	R	11.2	R	14,848	R	19.7 R
2017	3,085	R	4.4	R	14,769	R	-0.5 R
2018P	3,404		10.3		16,180		9.6

Symbols:

P provisional

Rrevised

... not applicable

Cruise ship expenditure in New Zealand

We present cruise ship expenditure in New Zealand on a year ended June basis (2015–18) to best align with the cruise season and cruise traveller statistics (see tables 5 and 6).

Estimates are provided at a national and regional level, by port. Expenditure movements can be influenced by a range of factors including the number of ship voyages, port visits, a transit versus exchange cruise, cruise ship capacity, a boutique versus large cruise ship, weather events, economic conditions, and exchange rates.

Vessel expenditure comprises shipping agents (ship visit logistics), bunkering (providing marine fuels), and providoring (providing produce and other supplies) sourced from key firms involved.

Visitor expenditure comprises shore excursions (predominantly pre-booked), including overland tours, and spending ashore. Shore excursions expenditure is sourced from a number of key firms and combined with a card transaction-based model to estimate total spending by passengers and crew.

A vessel and visitor expenditure breakdown by region by port is not possible due to the confidentiality of businesses providing data.

Note airfares for international passengers and crew are excluded, as is cruise expenditure by domestic passengers (New Zealand passport holders). The domestic expenditure undertaken by passengers is recorded within existing domestic tourism estimates but is not currently separately identifiable.

For additional methodological information, refer to appendix 2 – see <u>Cruise ship expenditure by</u> <u>international visitors</u>.

In the year ended June 2018, cruise ship expenditure in New Zealand totalled \$434.0 million, an increase of 18.3 percent (see table 5).

Auckland and Tauranga ports recorded the largest total spending. In the year ended June 2018, Auckland spend totalled \$131.4 million, up 11.2 percent, with Tauranga recording \$65.9 million, down 3.0 percent (see table 6).

For cruise traveller statistics, refer to <u>Cruise ship traveller and expenditure statistics: Year ended June 2018</u>.

Table 5
Cruise ship expenditure in New Zealand

Year ended June 2015–18

		June	year		Change from	Change from	Change from		
Component	2015	2016	2017	2018	2015 to 2016	2016 to 2017	2017 to 2018		
		\$(0	00)		Annual percentage change				
Vessel	64,408	84,421	118,461	106,564	31.1	40.3	-10.0		
Visitor	184,181	216,709	215,450	284,043	17.7	-0.6	31.8		
GST	27,627	32,651	32,903	43,352	18.2	0.8	31.8		
Total	276,217	333,781	366,813	433,959	20.8	9.9	18.3		

Note: Figures for all years prior to 2018 have been revised.

Table 6
Cruise ship expenditure in New Zealand

By regions and ports visited Year ended June 2015–18

		June y	/ear		Change from	Change from	Change from
Region by port	2015	2016	2017	2018	2015 to 2016	2016 to 2017	2017 to 2018
		\$(00	00)		Annı	ual percentage cha	ange
Northland							
Bay of Islands ⁽¹⁾⁽²⁾	6,400	8,121	7,835	14,079	26.9	-3.5	79.7
Auckland							
Auckland ⁽¹⁾⁽³⁾	82,493	107,022	118,091	131,354	29.7	10.3	11.2
Waikato							
Mercury Bay (1)(4)	С	С	С	С	С	С	C
Bay of Plenty							
Tauranga ⁽¹⁾⁽⁵⁾	47,937	59,230	67,908	65,876	23.6	14.7	-3.0
Gisborne							
Gisborne ⁽¹⁾	С	С	С	С	С	С	C
Hawke's Bay							
Napier ⁽¹⁾	15,958	13,330	16,354	23,135	-16.5	22.7	41.5
Taranaki							
New Plymouth ⁽¹⁾	С	С	С	С	С	С	C
Wellington							
Wellington ⁽¹⁾⁽⁶⁾	28,007	35,596	34,255	41,739	27.1	-3.8	21.8
Tasman/Nelson	1,122	355	1,159	813	-68.4	226.5	-29.9
Golden Bay ⁽¹⁾⁽⁷⁾	С	С	С	С	С	С	C
Nelson ⁽¹⁾	С	С	С	С	С	С	C
Marlborough							
Marlborough Sounds (1)(8)	6,566	8,734	10,038	18,035	33.0	14.9	79.7
West Coast							
Jackson Bay ⁽¹⁾	С	С	С	С	С	С	C
Canterbury	29,534	32,772	35,004	38,702	11.0	6.8	10.6
Akaroa ⁽¹⁾	26,656	31,440	32,385	34,745	17.9	3.0	7.3
Lyttelton ⁽¹⁾	1,866	1,084	1,912	3,416	-41.9	76.4	78.7
Timaru ⁽¹⁾	C	C	C	C	С	С	C
Kaikoura ⁽¹⁾	С	С	С	С	С	С	C
Otago							
Dunedin ⁽¹⁾⁽⁹⁾	25,368	29,761	34,795	49,080	17.3	16.9	41.1
Southland	4,376	4,640	6,611	6,160	6.0	42.5	-6.8
Bluff ⁽¹⁾	C	C	C	Ć	С	С	C
Fiordland ⁽¹⁰⁾⁽¹¹⁾	С	С	С	С	С	С	C
Stew art Island ⁽¹⁾	371	156	218	426	-58.0	39.7	95.4
Other ⁽¹⁰⁾⁽¹¹⁾	С	С	С	С	С	С	C
GST	27,627	32,651	32,903	43,352	18.2	0.8	31.8
Total spend ⁽¹²⁾	276,217	333,781	366,813	433,959	20.8	9.9	18.3

At these ports, cruise travellers can potentially disembark and spend locally and within the wider region.
 Spending pre- and post- cruise is also included.

- 2. Includes Whangaroa and Whangarei.
- 3. Includes Waiheke Island.
- 4. Includes Whitianga and elsewhere in Mercury Bay.
- 5. Includes Rotorua and White Island.
- 6. Includes Kapiti Island.
- 7. Includes Kaiteriteri, Tarakohe, and elsewhere in Golden Bay.
- 8. Includes Picton, Motuara Island, Ship Cove, and elsewhere in the Marlborough Sounds.
- 9. Includes Port Chalmers.
- 10. At these ports, passengers are generally unlikely to disembark and spend money locally.
- 11. Includes all other locations.
- 12. The sum of regions does not match total spend due to confidential cells.

Symbol:

C confidential

Note: Figures for all years prior to 2018 have been revised.

Employment

In the year ended March 2018, tourism directly employed 216,012 people (see table 7 and figure 6).

Tourism activity directly generated 8.0 percent of total employment in New Zealand (see table 7). This compares with tourism generating 6.1 percent of direct value added to GDP (see <u>table 1</u>). The fact that tourism contributes more to total employment than it does to direct value added, reflects a higher level of labour intensity in tourism industries.

Table 7

Tourism employment⁽¹⁾⁽²⁾

Year ended March 2000–18

Year	Nu	umber of peop	ble	Number of people employed in tourism as a percentage of the total number of people employed				
ended March	Directly	Indirectly	Total	Directly	Indirectly	Total		
March	employed in	employed in	tourism	employed in	employed in	tourism		
	tourism	tourism	employment	tourism	tourism	employment		
					Percent			
2000	153,795	163,560	317,355	8.3	8.8	17.1		
2001	158,613	158,520	317,133	8.3	8.3	16.7		
2002	163,305	150,759	314,064	8.4	7.7	16.1		
2003	171,285	150,777	322,062	8.5	7.5	16.0		
2004	179,235	142,980	322,215	8.6	6.8	15.4		
2005	186,186	137,886	324,072	8.6	6.4	14.9		
2006	192,363	138,426	330,789	8.6	6.2	14.8		
2007	198,540	137,826	336,366	8.7	6.0	14.7		
2008	199,728	138,648	338,376	8.5	5.9	14.5		
2009	200,274	138,156	338,430	8.6	5.9	14.5		
2010	188,559	129,861	318,420	8.3	5.7	14.0		
2011	183,273	125,349	308,622	8.0	5.5	13.5		
2012	177,054	121,104	298,158	7.7	5.2	12.9		
2013	174,885	119,238	294,123	7.5	5.1	12.6		
2014	176,244	119,922	296,166	7.4	5.0	12.4		
2015	193,110	133,902	327,012	7.9	5.5	13.3		
2016	211,242	146,790	358,032	8.4	5.8	14.2		
2017	210,606	145,779	356,385	8.1	5.6	13.7		
2018P	216,012	149,304	365,316	8.0	5.5	13.5		

^{1.} Data is only available from 2000. For more details refer to appendix 2.

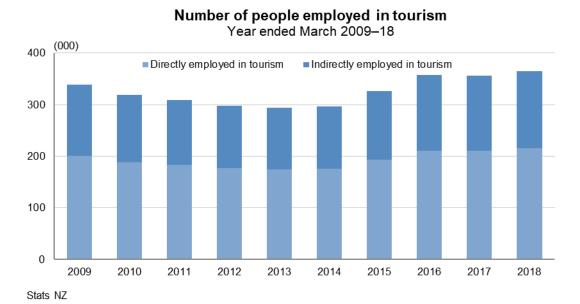
 $\textbf{Note:} \ \mathsf{Figures} \ \mathsf{for} \ \mathsf{all} \ \mathsf{years} \ \mathsf{prior} \ \mathsf{to} \ \mathsf{2018} \ \mathsf{have} \ \mathsf{been} \ \mathsf{revised}.$

Symbol:

P provisional

^{2.} Individual figures may not sum to stated totals due to rounding.

Figure 6



Overseas visitor arrivals

The number of international visitors increased 7.8 percent (276,186) in the year ended March 2018, following an increase of 8.9 percent in the previous year. Visitor numbers from Asia and the Americas experienced the strongest increases for the fourth consecutive year.

The number of visitors from Asia increased 9.4 percent (86,800), following a 13.3 percent increase in the previous year. Visitor numbers from the Americas increased 11.3 percent (48,176), while visitors from Europe increased 9.3 percent (49,920).

By purpose of visit, short-term visitor arrivals to New Zealand increased for the following categories:

- holiday up 9.2 percent (169,264 arrivals)
- visiting friends and relatives up 7.7 percent (78,768)
- conference and conventions up 7.7 percent (5,280)
- business up 1.3 percent (3,888)
- education up 1.8 percent (1,200).

See table 8 and figure 7 for a breakdown of international visitors by region of last permanent residence and by purpose of visit for the years ended March 2015–18.

Table 8

Overseas visitor arrivals⁽¹⁾⁽²⁾
Year ended March 2015–18

			Vas	u andad Mau	- L-					
-	0045	0040		ar ended Marc		0047	0040			
_	2015	2016	2017	2018	2016	2017	2018			
		Num	ber		Annual	percentage	change			
By region of last permanent residence										
Oceania	1,415,888	1,514,080	1,568,688	1,663,904	6.9	3.6	6.1			
Asia	681,568	814,640	923,056	1,009,856	19.5	13.3	9.4			
Europe	451,296	487,216	537,600	587,520	8.0	10.3	9.3			
Americas	307,024	348,192	426,384	474,560	13.4	22.5	11.3			
Other ⁽³⁾	88,624	89,472	78,000	76,272	1.0	-12.8	-2.2			
Total ⁽⁴⁾	2,947,901	3,255,463	3,543,631	3,819,817	10.4	8.9	7.8			
		Ву ри	pose of vis	sit						
Holiday	1,432,736	1,652,560	1,841,728	2,010,992	15.3	11.4	9.2			
Visiting friends & relatives	920,256	980,832	1,023,088	1,101,856	6.6	4.3	7.7			
Conferences & conventions	57,440	61,536	68,976	74,256	7.1	12.1	7.7			
Business	266,000	276,752	295,184	299,072	4.0	6.7	1.3			
Education	58,416	62,496	65,904	67,104	7.0	5.5	1.8			
Other ⁽⁵⁾	209,552	219,424	238,848	258,832	4.7	8.9	8.4			

- 1. Intended length of stay in New Zealand is less than 12 months.
- 2. Individual figures may not sum to stated totals due to rounding.
- 3. Includes not stated.
- 4. These totals are actual counts, and may differ from the sum of individual figures for different countries, which are derived from samples.
- 5. Includes unspecified.

Stats NZ

Figure 7

Overseas visitor arrivals by region of residence Year ended March 2015–18

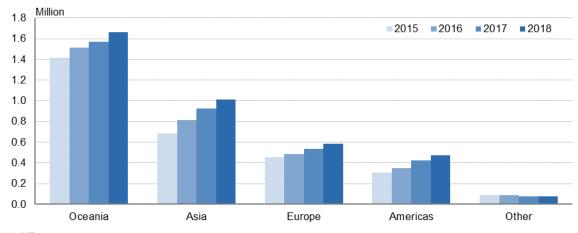


Table 9 presents the breakdown of international visitors by selected country of last permanent residence for the years ended March 2015–18 (see also figure 8).

Table 9
Selected overseas visitor arrivals⁽¹⁾⁽²⁾
Year ended March 2015–18

		Year ended March								
	2015	2016	2017	2018	2016	2017	2018			
		Nur	mber	Annual	percentage	change				
By country of last permanent residence										
Australia	1,273,152	1,364,736	1,406,256	1,495,392	7.2	3.0	6.3			

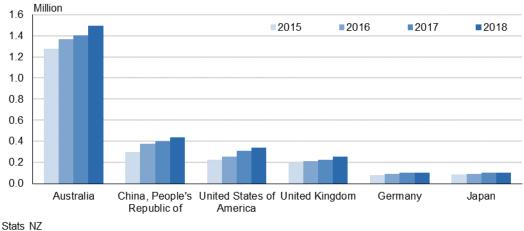
	By country of last permanent residence										
Australia	1,273,152	1,364,736	1,406,256	1,495,392	7.2	3.0	6.3				
China, People's Republic of	295,552	377,840	404,384	437,696	27.8	7.0	8.2				
United States of America	226,960	253,792	312,816	340,144	11.8	23.3	8.7				
United Kingdom	199,760	213,792	222,784	254,832	7.0	4.2	14.4				
Germany	81,152	90,496	102,608	102,864	11.5	13.4	0.2				
Japan	83,392	91,344	102,320	102,416	9.5	12.0	0.1				

^{1.} Intended length of stay in New Zealand is less than 12 months.

Stats NZ

Figure 8





By country of last permanent residence, the majority of short-term visitor arrivals to New Zealand originated from these selected markets:

- Australia up 6.3 percent (89,136 arrivals)
- China up 8.2 percent (33,312)
- United States of America up 8.7 percent (27,328)
- United Kingdom up 14.4 percent (32,048)
- Germany up 0.2 percent (256)
- Japan up 0.1 percent (96).

^{2.} These totals are derived from sample counts.

In the context of the TSA, the term 'tourist' includes travellers who might not usually be associated with the term. For instance, in addition to holiday and leisure travel, it covers other visitor activities, such as conducting business, attending meetings and conferences, and arriving for short-term education. Domestic costs incurred by New Zealanders travelling overseas (such as booking fees or commissions paid to the travel agency) are included in domestic travel expenditure, as well as tourism-specific consumer durable goods (such as outdoor items and equipment) bought either before or after the trip.

Table 10 presents the breakdown of guest nights by origin, sourced from Stats NZ's accommodation survey, for the years ended March 2015–18 (see also figure 9).

In the year ended March 2018, 39.9 million guest nights were spent in short-term commercial accommodation, a 3.9 percent increase compared with the previous year. This follows an increase of 3.2 percent in the year ended March 2017 and an increase of 5.7 percent in the year ended March 2016. The percentage increase in international guest nights has exceeded that of domestic for the last four years.

Table 10

Guest nights by origin⁽¹⁾
Year ended March 2015–18

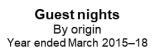
Year	International	guest nights	Domestic g	juest nights	Total guest nights			
ended March	Number (000)	Annual percentage change	Number (000)	Annual percentage change	Number (000)	Annual percentage change		
2015	14,195		21,022		35,217	•••		
2016	15,265	7.5	21,963	4.5	37,229	5.7		
2017	16,598	8.7	21,820	-0.7	38,418	3.2		
2018	17,590	6.0	22,336	2.4	39,926	3.9		

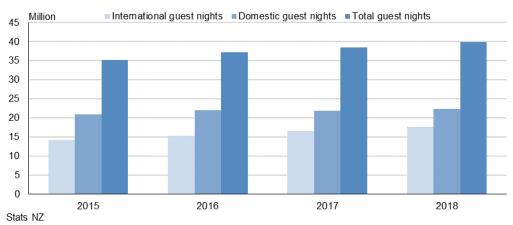
^{1.} Individual figures may not sum to stated totals due to rounding.

Symbol:

... not applicable

Figure 9





- Significant changes to flights in the year ended March 2018 included:
 - o Air New Zealand commenced services between Auckland and Haneda Tokyo.
 - Air New Zealand began Boeing 787-9 Dreamliner services between Auckland and Adelaide.
 - Air New Zealand increased services from Auckland to Houston deploying its Boeing 787-9
 Dreamliner aircraft.
 - o Air New Zealand increased its Auckland to Vancouver services from January 2018.
 - Air New Zealand moved to Boeing 787-9 Dreamliner and Boeing 777-200 services at least twice weekly year-round between Auckland and Apia.
 - o Sichuan Airlines began direct flights from Chengdu to Auckland.
 - Cathy Pacific began a new seasonal service on the Airbus A350 between Hong Kong and Christchurch.
 - China Southern Airlines increased its services between Guangzhou and Christchurch during the summer season.
 - Philippine Airlines began Airbus A340 services direct from Manila to Auckland.
 - o Thai Airways increased its services from Bangkok to Auckland, offering daily flights.
 - Air New Zealand was forced to reschedule international flights and make cancellations as a result of issues, and the need for early maintenance checks, with Rolls-Royce engines across some of its Boeing 787-9 Dreamliner aircraft.
 - Air New Zealand leased Airbus 330 and Airbus 340 from Hi Fly to operate some Auckland—Sydney and Auckland—Perth services.
 - The temporary shut-down of Refining New Zealand's pipeline into Auckland impacted airlines operations into and out of Auckland Airport.
 - o Nauru Airlines began services from Norfolk Island to Auckland.
 - o Virgin Australia began after-dark services between Brisbane and Queenstown.
 - o Qantas began after-dark services between Sydney and Queenstown.
 - o Jetstar reintroduced services between Wellington and Queenstown.
 - Air New Zealand added 180,000 extra domestic seats across its network between November 2017 and March 2018.
 - o Air New Zealand added a Sunday return jet service between Dunedin and Auckland.
 - Air New Zealand added nearly 1000 seats to accommodate competitors in the Hawke's Bay International Marathon held in May.
 - Air New Zealand added more than 7100 extra seats into Auckland and Dunedin to accommodate fans attending Ed Sheeran's concerts.
 - Air New Zealand deployed additional capacity between Auckland and Wellington for the All Whites versus Peru FIFA World Cup Intercontinental Playoff held in Wellington in November.
 - Sunair returned to Whangarei with weekday flights offered to Great Barrier Island,
 Hamilton, Tauranga or Rotorua. Sunair was subsequently grounded by the Civil Aviation
 Authority.
 - Originair commenced flights between Nelson and New Plymouth.

- o Sounds Air ceased flights between Blenheim and Kaikoura.
- o Sounds Air added new flights on the Wellington to Blenheim route.
- The 2017 British and Irish Lions Rugby Tour generated international and domestic tourism activity within New Zealand during the year ended March 2018.
- Cruise voyages and passenger numbers grew strongly over the March 2015–18 years.
- The Easter public holidays occurred partly in the year ended March 2018, did not occur in the year ended March 2017, occurred twice in the year ended March 2016, and once in the year ended March 2015.

- Significant changes to flights in the year ended March 2017 included:
 - Qatar Airways began a daily, non-stop service between Auckland and Doha, becoming the world's longest commercial passenger flight.
 - Emirates introduced the double-decker A380 on its daily Auckland–Dubai service replacing its Boeing 777-200LR.
 - o United Airlines began flights between Auckland and San Francisco.
 - o Air New Zealand reinstated seasonal flights between Auckland and Osaka.
 - Hong Kong Airlines began services between Auckland and Hong Kong.
 - o American Airlines began daily services between Auckland and Los Angeles.
 - o Tianjin Airlines began flights between Auckland and Tianjin.
 - Hainan Airlines began flights between Auckland and Shenzhen.
 - Qantas expanded it seasonal service between Christchurch and Brisbane to an all-yearround service.
 - More than 300 additional return flights were provided direct to Christchurch from Sydney, Melbourne, and Brisbane during the ski season.
 - o Asiana Airlines began a summer charter service between Christchurch and Incheon.
 - o Emirates introduced the A380 on its Christchurch–Sydney–Dubai service.
 - o Fiji airways began a third service between Christchurch and Nadi.
 - o China Southern Airlines increased its services into Christchurch over the summer season.
 - Air New Zealand and Jetstar commenced evening flights into Queenstown, following investment in a series of major airfield infrastructure improvements.
 - Singapore Airlines began the Capital Express service from Singapore via Wellington via Canberra.
 - Air New Zealand and Singapore Airlines announced the extension of their alliance to include travel between Wellington and Singapore.
 - Jetstar suspended direct flights between Wellington to Melbourne.
 - o Air New Zealand began Boeing 787-9 Dreamliner services between Auckland and Hawaii.
 - o Air New Zealand began Boeing 787-9 Dreamliner services on the Auckland–Buenos Aires route.
 - Air New Zealand suspended services between Whanganui

 –Auckland and Blenheim

 Christchurch.
 - Air Chathams began scheduled services between Auckland and Whanganui.

- o Sounds Air began services between Christchurch and Blenheim.
- o Air New Zealand began services between Auckland and Ho Chi Minh City.
- Air New Zealand began operating an all-jet-schedule between Dunedin and Wellington on weekdays.
- Air New Zealand began Boeing 787-9 Dreamliner services between Auckland and Rarotonga.
- Air New Zealand began Boeing 787-9 Dreamliner services on the Auckland

 —Papeete route.
- Air New Zealand and Cathay Pacific extended their strategic alliance partnership on services between New Zealand and Hong Kong through until 2022.
- Air New Zealand increased capacity on a number of regional routes including Auckland
 Kerikeri, Auckland–Rotorua, Gisborne–Auckland, and Gisborne–Wellington.
- Kiwi Regional Airlines ceased operations.
- *MS Ovation of the Seas*, the biggest cruise ship to voyage to New Zealand, visited Milford Sound, Dunedin, Picton, Wellington, Napier, Tauranga, Auckland, and Bay of Islands.
- A damaging earthquake struck the Kaikoura district and surrounding regions in November 2016. The expenditure implications/impacts of this event are not separately identifiable.
- Air New Zealand disposed of its remaining stake in Virgin Australia.
- <u>Tourism 2025 Two Years On</u> was published, reaffirming the Tourism 2025 growth framework and its five themes of Connectivity; Target for value; Visitor Experience; Productivity; and Insight.
- Tourism New Zealand launched the latest evolution of its <u>100% Pure New Zealand</u> campaign across international tourism markets.

- Significant changes to flights in the year ended March 2016 included:
 - o China Eastern Airlines launched year-round flights between Auckland and Shanghai.
 - o AirAsia X launched flights from Kuala Lumpur via the Gold Coast to Auckland.
 - Emirates began a non-stop service between Dubai and Auckland, the longest non-stop scheduled flight in the world.
 - Air China began a daily service between Beijing and Auckland in partnership with Air New Zealand.
 - Philippine Airlines began a service between Manila via Cairns and Auckland.
 - o Air New Zealand began a direct service between Auckland to Houston.
 - China Southern Airlines began year-round double-daily flights between Guangzhou and Auckland.
 - Fiji Airways began flights between Nadi and Wellington.
 - Air New Zealand introduced new seasonal flights between Perth and Auckland over the summer—autumn period.
 - o Air New Zealand began a direct service between Auckland and Buenos Aires.
 - o Air New Zealand began a daily return service between Auckland and Vancouver over the peak northern winter period.
 - Air New Zealand, in conjunction with Virgin Australia, operated a seasonal Sunshine Coast service between Auckland and Maroochydore over the summer period.

- Qantas operated additional services across the Tasman during early spring, primarily between Auckland and Sydney.
- o Qantas began a seasonal Wellington to Brisbane service over the summer holiday period.
- o China Southern Airlines began direct flights between Guangzhou and Christchurch.
- o China Airlines expanded its summer service between Taipei via Sydney and Christchurch.
- China Airlines began a service between Taipei via Melbourne to Christchurch for the summer period.
- Singapore Airlines operated additional flights from Singapore to Christchurch over the New Zealand summer period.
- Qantas operated additional flights between Christchurch and Brisbane, and Christchurch and Sydney.
- o Jetstar operated additional trans-Tasman services over the Christmas holiday season, along with extra summer flights to Queenstown and Christchurch from Australia.
- Jetstar increased its services to Queenstown over the March to October period, including additional return services from Melbourne and Sydney, and began a new Gold Coast service.
- Qantas added extra seasonal services between Sydney and Queenstown, and Brisbane and Queenstown.
- Air New Zealand and Virgin Australia increased winter trans-Tasman services to Queenstown.
- Jetstar launched a new regional network, with services between Auckland and Nelson;
 Auckland and Napier; Auckland and New Plymouth; Auckland and Palmerston North; and
 Wellington and Nelson.
- o Jetstar began services between Wellington and Dunedin.
- Air New Zealand increased its total domestic capacity by approximately 650,000 seats, including:
 - around 180,000 more seats between Christchurch and Auckland
 - 110,000 more seats between Queenstown and Auckland
 - 135,000 more seats between Auckland and Wellington
 - 20,000 new seats between Christchurch and Queenstown.
- Air New Zealand made changes to its regional network, stopping services to Kaitaia, Whakatane, and Westport. They also stopped services between Whangarei and Wellington; Taupo and Wellington; Palmerston North and Nelson; and Hamilton and Auckland.
- o Air Chathams began twice-daily flights between Whakatane and Auckland.
- Barrier Air (previously Great Barrier Airlines) began services between Kaitaia and Auckland.
- Sounds Air began services between Westport and Wellington; Taupo and Wellington; and Napier and Blenheim.
- Kiwi Regional Airlines began services for Dunedin—Queenstown, Hamilton—Nelson, Tauranga—Nelson, and Nelson—Dunedin.
- Tourism New Zealand launched the latest evolution of its 100% Pure New Zealand campaign across international tourism markets.

- Significant changes to flights in the year ended March 2015 included:
 - Air New Zealand and Singapore Airlines entered into an alliance, with increased flights between New Zealand and Singapore from January 2015.
 - China Eastern Airlines began direct flights between Shanghai and Auckland for the period December 2014 to March 2015.
 - Air New Zealand and Virgin Australia increased trans-Tasman services to Queenstown and Christchurch for the November to March season.
 - Singapore Airlines increased the number of flights to Christchurch during the summer holiday season.
 - o Air New Zealand took delivery of its first 787-9 Dreamliner, which began Auckland–Perth services in December 2014.
 - o Qantas began a seasonal service from Auckland to Perth in December 2014.
 - China Southern Airlines increased flights between Guangzhou and Auckland for the October to March 2015 period.
 - China Airlines began seasonal flights between Christchurch
 –Sydney
 –Taipei during the period December 2014 to March 2015.
 - China Airlines increased flights in its Taipei–Brisbane–Auckland route during the peak
 New Zealand summer period.
 - Jetstar began services between Wellington and Gold Coast, and Wellington and Melbourne.
- New Zealand jointly hosted the 2015 Cricket World Cup in the March 2015 year, though we cannot separately identify this event's effect on expenditure.
- New Zealand hosted a royal tour by The Duke and Duchess of Cambridge in the March 2015 year.
- The third film of the Hobbit trilogy was released in the March 2015 year. The second film of the Hobbit trilogy was released in the March 2014 year, and the world premiere of the first Hobbit film took place in New Zealand in the March 2013 year.
- Air New Zealand acquired additional stakes in Virgin Australia in the March 2015 and March 2014 years.

Tourism expenditure

The major focus of the TSA is to identify and measure tourism expenditure on goods and services produced within the New Zealand economy.

By determining tourism expenditure, tourism's direct contribution to GDP can be derived and compared with the contribution of other industries such as agriculture or manufacturing, see table 11.

Table 11

Tourism expenditure by type of product⁽¹⁾⁽²⁾

Year ended March 2015–18

	Year ended March									
Product	2015	2016	2017	2018P	2016	2017	2018P			
	•	\$(mil	lion)		Annual percentage change					
Accommodation services	2,455	2,656	2,890	3,155	8.2	8.8	9.2			
Food and beverage serving services	3,541	4,124	4,209	4,575	16.5	2.1	8.7			
Air passenger transport	4,789	5,018	4,976	5,302	4.8	-0.8	6.6			
Other passenger transport	3,533	3,805	4,009	4,308	7.7	5.4	7.5			
Imputed rental on holiday homes	737	759	781	809	3.0	2.9	3.6			
Cultural, recreation, and gambling services	913	1,019	1,022	1,109	11.6	0.3	8.5			
Retail sales – alcohol, food, and beverages	2,066	2,246	2,284	2,477	8.7	1.7	8.5			
Retail sales – fuel and other automotive products	1,859	1,834	1,892	1,990	-1.3	3.2	5.2			
Retail sales – other	5,899	6,930	7,103	7,676	17.5	2.5	8.1			
Education services	762	855	878	954	12.2	2.7	8.7			
Other tourism products	2,465	2,890	2,878	3,106	17.2	-0.4	7.9			
Total tourism demand excluding GST	29,019	32,136	32,922	35,461	10.7	2.4	7.7			
GST paid on purchases by tourists	2,921	3,315	3,409	3,684	13.5	2.8	8.1			
Total tourism expenditure	31,940	35,451	36,331	39,145	11.0	2.5	7.7			

^{1.} All product values are in producers' prices.

Note: Figures for all years prior to 2018 have been revised.

Symbol:

P provisional

Stats NZ

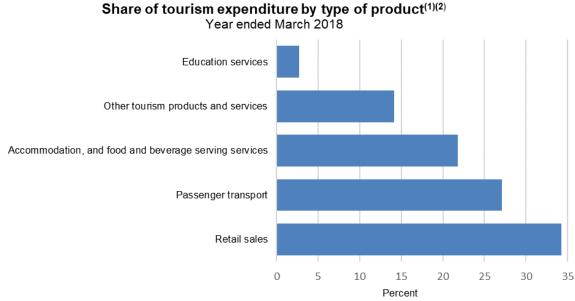
Table 11 shows that for the year ended March 2018:

- Total tourism expenditure increased 7.7 percent, following increases of 2.5 percent in 2017 and 11.0 percent in 2016.
- The strongest percentage increases in tourism expenditure were in:
 - o accommodation services, increasing 9.2 percent (\$265 million)
 - o food and beverage serving services, increasing 8.7 percent (\$366 million)
 - o education services, increasing 8.7 percent (\$76 million).

^{2.} Individual figures may not sum to stated totals due to rounding.

The main products tourists purchased were retail sales and passenger transport, which contributed 34.2 percent and 27.1 percent, respectively. Tourists spent 21.8 percent of their budget on accommodation, and food and beverage serving services. They spent 14.2 percent on other tourism products and services, and 2.7 percent on education services (see figure 10, which presents the share of tourism expenditure, excluding GST).

Figure 10



- 1. Individual percentages may not sum due to rounding.
- 2. Product totals exclude GST.

Stats NZ

Table 12 presents tourism expenditure by type of product and by type of tourist for the years ended March 2015–18. The tourism product ratio is the proportion of total supply (national production plus imports) of each product that tourists purchase.

For the year ended March 2018:

- Total household tourism expenditure increased 6.7 percent, following an increase of 4.0 percent the previous year.
- The increase in household tourism expenditure was strongest in 'retail sales other', up \$315 million. Retail sales alcohol, food, and beverages increased \$153 million from the previous year, with food and beverage serving services increasing \$134 million.
- Between 2015 and 2018, total household tourism spending increased 18.7 percent. Over the same period, total household consumption expenditure increased 16.8 percent.
- Total spending by international tourists in New Zealand increased 9.6 percent, following a
 decrease of 0.5 percent in the March 2017 year, and an increase of 19.7 percent in the
 March 2016 year.
- The increase in international tourism expenditure was strongest in 'retail sales other', up \$258 million. Food and beverage serving services increased \$214 million from the previous year, and accommodation services increased \$181 million.

Table 12

Tourism expenditure⁽¹⁾⁽²⁾

By type of product and type of tourist

Year ended March 2015–18

	Domestic	demand				
Product	Business and government demand	Household demand	International demand	Total demand	Total supply	Tourism product ratio
		ļ.	\$(million)			
	20)15				
A second details a service of	550	504	4 202	0.455	0.474	0.00
Accommodation services	558	594	1,303	2,455	2,474	0.99
Food and beverage serving services	380	1,254	1,907	3,541	8,080	0.44
Air passenger transport	1,266	1,458	2,065	4,789	4,842	0.99
Other passenger transport	1,426	1,192	915	3,533	5,165	0.68
Imputed rental on holiday homes	0	737	0	737	737	1.00
Cultural, recreation, and gambling services	0	590	324	913	3,861	0.24
Retail sales – alcohol, food, and beverages	0	1,729	337	2,066	58,843	0.04
Retail sales – fuel and other automotive products	735	550	574	1,859	10,817	0.17
Retail sales – other	0	3,902	1,996	5,899	46,137	0.13
Education services	0	232	529	762	5,329	0.14
Other tourism products	247	1,018	1,200	2,465	43,546	0.06
Total tourism demand excluding GST	4,612	13,257	11,150	29,019		•••
GST paid on purchases by tourists	5	1,656	1,259	2,921		
Total tourism expenditure	4,617	14,914	12,409	31,940		
	20)16				
Accommodation services	555	662	1,439	2,656	2,677	0.99
Food and beverage serving services	386	1,392	2,347	4,124	8,883	0.46
Air passenger transport	1,334	1,393	2,291	5,018	5,056	0.99
Other passenger transport	1,472	1,254	1,079	3,805	5,513	0.69
Imputed rental on holiday homes	0	759	0	759	759	1.00
Cultural, recreation, and gambling services	0	626	394	1,019	4,093	0.25
Retail sales – alcohol, food, and beverages	0	1,835	411	2,246	60,190	0.04
Retail sales – fuel and other automotive products	632	562	640	1,834	9,542	0.19
Retail sales – other	0	4,307	2,623	6,930	49,213	0.14
Education services	0	278	576	855	5,733	0.15
Other tourism products	258	1,104	1,527	2,890	45,086	0.06
Total tourism demand excluding GST	4,637	14,171	13,327	32,136		
GST paid on purchases by tourists	6	1,789	1,521	3,315		•••
Total tourism expenditure	4,643	15,960	14,848	35,451	•••	

Table continues next page

For footnotes, see end of table.

Table 12 continued

	Domestic	demand						
Product	Business and government demand	Household demand	International demand	Total demand	Total supply	Tourism product ratio		
			\$(million)		1			
2017								
Accommodation services	583	695	1,612	2,890	2,924	0.99		
Food and beverage serving services	412	1,462	2,335	4,209	9,899	0.43		
Air passenger transport	1,418	1,277	2,281	4,976	5,030	0.99		
Other passenger transport	1,610	1,315	1,084	4,009	5,798	0.69		
Imputed rental on holiday homes	0	781	0	781	781	1.00		
Cultural, recreation, and gambling services	0	633	389	1,022	4,400	0.23		
Retail sales – alcohol, food, and beverages	0	1,878	406	2,284	61,527	0.04		
Retail sales – fuel and other automotive products	661	610	621	1,892	9,897	0.19		
Retail sales – other	0	4,595	2,508	7,103	52,009	0.14		
Education services	0	284	594	878	6,112	0.14		
Other tourism products	275	1,191	1,411	2,878	47,488	0.06		
Total tourism demand excluding GST	4,959	14,721	13,242	32,922				
GST paid on purchases by tourists	6	1,875	1,527	3,409	•••			
Total tourism expenditure	4,966	16,597	14,769	36,331				
	20	18P						
Accommodation services	606	756	1,793	3,155	3,191	0.99		
Food and beverage serving services	430	1,596	2,549	4,575	10,303	0.44		
Air passenger transport	1,488	1,375	2,438	5,302	5,363	0.99		
Other passenger transport	1,747	1,370	1,191	4,308	6,186	0.70		
Imputed rental on holiday homes	0	809	0	809	809	1.00		
Cultural, recreation, and gambling services	0	668	441	1,109	4,572	0.24		
Retail sales – alcohol, food, and beverages	0	2,031	446	2,477	67,983	0.04		
Retail sales – fuel and other automotive products	681	628	680	1,990	10,872	0.18		
Retail sales – other	0	4,910	2,766	7,676	54,712	0.14		
Education services	0	302	652	954	6,411	0.15		
Other tourism products	296	1,262	1,549	3,106	50,549	0.06		
Total tourism demand excluding GST	5,249	15,708	14,505	35,461		•••		
GST paid on purchases by tourists	7	2,003	1,675	3,684				
Total tourism expenditure	5,255	17,710	16,180	39,145				

^{1.} All product values are in producers' prices.

Note: Figures for all years prior to 2018 have been revised.

Symbols:

P provisional

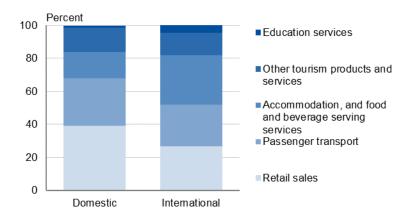
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^{2.} Individual figures may not sum to stated totals due to rounding.

The biggest share of domestic demand was retail sales, at 39.4 percent, while international tourism's demand of retail represented only 26.8 percent of international spending. International tourists spent the remainder of their budget primarily on accommodation, and food and beverage serving services (29.9 percent), and passenger transport (25.0 percent) (see figure 11).

Share of tourism expenditure by type of product and type of tourist⁽¹⁾

Year ended March 2018



1. Product totals exclude GST.

Tourism supply

The tourism supply of an industry is derived by summing the value of tourism products sold by that industry. The value of tourism product sales is derived by multiplying the total supply (national production plus imports) by its corresponding tourism product ratio.

In the absence of supply and use tables for the year ended March 2018, we derived an initial value of supply by product by industry for the same period from a variety of sources (covered in detail in Appendix 2: Methodology). In table 13, supply by product is shown only for tourism-characteristic industries (see Appendix 1: Conceptual framework).

Total supply and tourism supply by product are shown in table 13 for the years ended March 2015–18.

Points to note from table 13:

- Goods and services can be consumed/purchased by tourists and non-tourists. The tourism
 product ratio indicates the proportion of a product's supply that is purchased by tourists. In
 2018, for example, the tourism product ratio for accommodation services was 0.99. This
 means that almost all accommodation available was purchased by tourists. In contrast,
 tourists purchased only 0.18 of retail supplies of fuel and other automotive products.
- Tourism supply increased 7.7 percent in the March 2018 year. From 2015 to 2018, tourism supply increased at a faster rate than total supply (22.2 percent compared with 16.4 percent over this period).
- Imports sold directly to tourists represented 11.2 percent of total tourism supply in the March 2018 year, compared with 10.8 percent in the year ended March 2015.

Table 13

Derivation of tourism supply from total supply⁽¹⁾⁽²⁾
Year ended March 2015–18

	Total supply					Tourism supply				
Product	Tourism- characteristic industries	All other industries	Imports	Total	Tourism product ratio	Tourism- characteristic industries	All other industries	Imports sold directly to tourists by retailers	Total	
		\$(millio	on)				\$(millio	n)	l .	
			2015							
Accommodation services	2.001	473	0	2.474	0.99	1,986	469	0	2,455	
Food and beverage serving services	7,166	914	0	8,080	0.44	3,155	386	0	3,541	
Air passenger transport	4,786	56	0	4,842	0.99	4,734	56	0	4,789	
Other passenger transport	4,810	355	0	5,165	0.68	3,304	229	0	3,533	
Imputed rental on holiday homes	0	737	0	737	1.00	0	737	0	737	
Cultural, recreation, and gambling services	3,657	204	0	3,861	0.24	845	68	0	913	
Retail sales – alcohol, food, and beverages	1,345	51,898	5,600	58,843	0.04	243	1,566	257	2,066	
Retail sales – fuel and other automotive products	3	7,291	3,523	10,817	0.17	1	1,324	535	1,859	
Retail sales – other	195	26,777	19,165	46,137	0.13	38	3,530	2,331	5,899	
Education services	14	5,314	0	5,329	0.14	2	759	0	762	
Other tourism products	332	43,214	0	43,546	0.06	30	2,436	0	2,465	
Total supply of products	24,309	137,234	28,288	189,832						
Total tourism supply of products						14,337	11,559	3,123	29,019	
			2016							
Accommodation services	2,162	515	0	2,677	0.99	2,145	511	0	2,656	
Food and beverage serving services	7,955	928	0	8,883	0.46	3,705	419	0	4,124	
Air passenger transport	4,997	58	0	5,056	0.99	4,960	58	0	5,018	
Other passenger transport	5,152	362	0	5,513	0.69	3,570	235	0	3,805	
Imputed rental on holiday homes	0	759	0	759	1.00	0	759	0	759	
Cultural, recreation, and gambling services	3,876	217	0	4,093	0.25	944	76	0	1,019	
Retail sales – alcohol, food, and beverages	1,411	52,603	6,177	60,190	0.04	264	1,676	306	2,246	
Retail sales – fuel and other automotive products		6,578	2,961	9,542	0.19	1	1,336	496	1,834	
Retail sales – other	229	27,768	21,217	49,213	0.14	48	4,059	2,822	6,930	
Education services	16	5,717	0	5,733	0.15	3	852	0	855	
Other tourism products	343	44,742	0	45,086	0.06	29	2,861	0	2,890	
Total supply of products	26,144	140,246	30,354	196,744						
Total tourism supply of products						15,670	12,841	3,625	32,136	

For footnotes, see end of table.

Table continues next page

Table 13 continued

	Total supply					Tourism supply			
Product	Tourism- characteristic industries	All other industries	Imports	Total	Tourism product ratio	Tourism- characteristic industries	All other industries	Imports sold directly to tourists by retailers	Total
		\$(milli	on)	ı	1		\$(millio	on)	ı
		:	2017						
Accommodation services	2,376	548	0	2,924	0.99	2,349	542	0	2,890
Food and beverage serving services	8,877	1,022	0	9,899	0.43	3,790	419	0	4,209
Air passenger transport	4,967	63	0	5,030	0.99	4,913	62	0	4,976
Other passenger transport	5,426	372	0	5,798	0.69	3,764	245	0	4,009
Imputed rental on holiday homes	0	781	0	781	1.00	0	781	0	781
Cultural, recreation, and gambling services	4,170	230	0	4,400	0.23	948	74	0	1,022
Retail sales – alcohol, food, and beverages	1,588	53,892	6,047	61,527	0.04	276	1,679	330	2,284
Retail sales – fuel and other automotive products	3	7,048	2,845	9,897	0.19	1	1,414	477	1,892
Retail sales – other	264	29,368	22,378	52,009	0.14	53	4,177	2,874	7,103
Education services	17	6,095	0	6,112	0.14	3	875	0	878
Other tourism products	364	47,125	0	47,488	0.06	31	2,848	0	2,878
Total supply of products	28,053	146,542	31,270	205,865					
Total tourism supply of products						16,127	13,114	3,681	32,922
		2	2018P						
Accommodation services	2,618	573	0	3,191	0.99	2,589	566	0	3,155
Food and beverage serving services	9,222	1,081	0	10,303	0.44	4,110	466	0	4,575
Air passenger transport	5,298	66	0	5,363	0.99	5,237	65	0	5,302
Other passenger transport	5,785	402	0	6,186	0.70	4,043	265	0	4,308
Imputed rental on holiday homes	0	809	0	809	1.00	0	809	0	809
Cultural, recreation, and gambling services	4,330	242	0	4,572	0.24	1,030	80	0	1,109
Retail sales – alcohol, food, and beverages	1,667	59,919	6,397	67,983	0.04	303	1,824	349	2,477
Retail sales – fuel and other automotive products	3	7,860	3,010	10,872	0.18	1	1,505	484	1,990
Retail sales – other	284	30,757	23,671	54,712	0.14	61	4,489	3,126	7,676
Education services	19	6,393	0	6,411	0.15	3	951	0	954
Other tourism products	386	50,163	0	50,549	0.06	35	3,071	0	3,106
Total supply of products	29,611	158,263	33,078	220,952					
Total tourism supply of products						17,412	14,091	3,959	35,461

^{1.} Tourism supply by product may differ from that obtained by multiplying total supply by the relevant tourism product ratio. Supply is generally calculated at a finer product level than show n.

Note: Figures for all years prior to 2018 have been revised.

Symbols:

P provisional

... not applicable

^{2.} Individual figures may not sum to stated totals due to rounding.

Tourism value added

Direct tourism value added

Direct tourism value added calculations are usually made at a finer level of industry detail than is presented in table 14. For reasons of confidentiality and practicality, we show only the working level of calculations in this report.

We calculate the tourism industry ratio by dividing tourism supply by industry by the total supply for that industry. The tourism industry ratio represents the proportion of each industry's output that is consumed by tourists.

We multiply tourism industry ratios through each production account for all industries to produce direct tourism value added. This is summarised and presented in table 14 for the years ended March 2015–18.

Table 14

Direct tourism value added⁽¹⁾
Year ended March 2015–18

	Year ended March								
	2015	2016	2017	2018P	2016	2017	2018P		
	\$(million)					ial percentage change			
Published GDP	242,092	254,112	269,857	284,685	5.0	6.2	5.5		
Less GST, import duties, and other taxes	•	,	,	,					
on production	20,269	21,576	23,452	24,569	6.4	8.7	4.8		
Gives contribution to GDP from production	221,823	232,536	246,405	260,116	4.8	6.0	5.6		
Tourism output of tourism-characteristic industries	14,337	15,670	16,127	17,412	9.3	2.9	8.0		
Less tourism intermediate consumption of tourism-characteristic industries	7,903	8,299	8,500	9,180	5.0	2.4	8.0		
Gives direct tourism value added of tourism-characteristic industries	6,433	7,370	7,627	8,234	14.6	3.5	8.0		
Plus direct tourism value added of all									
other industries	6,232	7,072	7,069	7,619	13.5	0.0	7.8		
Gives total direct tourism value added	12,664	14,443	14,698	15,852	14.0	1.8	7.9		
	ı	Percent							
Direct tourism value added as a percentage of total industry contribution to GDP	5.7	6.2	6.0	6.1					

^{1.} Individual figures may not sum to stated totals due to rounding.

Note: Figures for all years prior to 2018 have been revised.

Symbols:

P provisional

... not applicable

Point to note from table 14:

 Between 2015 and 2018, direct tourism value added (also referred to as tourism's direct contribution to GDP) increased 25.2 percent, a faster rate than the contribution to GDP from domestic production, which increased 17.3 percent.

As shown in <u>figure 1</u>, total expenditure on goods and services by tourists (\$39.1 billion in 2018) consists of three components:

- Goods and services worth \$31.5 billion produced in New Zealand and directly purchased by tourists. Direct tourism output consisted of \$1.6 billion of intermediate inputs, and \$15.9 billion of direct tourism value added.
- Imports of \$4.0 billion sold directly to tourists by retailers.
- GST of \$3.7 billion paid on goods and services purchased by tourists.

Domestically produced goods are sold directly to tourists by retailers, and only the retail margin (production value of the turnover of the retailer) of these sold goods is recorded in the direct tourism value added. The value added in the production of these goods is not part of tourism direct gross value added, but is to be considered within the indirect effects.

Indirect tourism value added and imports

As well as measuring direct tourism value added, we report on indirect tourism value added (or tourism's indirect contribution to GDP). This broader measure goes beyond the value added generated by producers directly supplying tourism products, and embraces the total value added of all producers both directly and indirectly.

Measuring indirect tourism value added involves tracing the flow-on effects of businesses' intermediate purchases that are used directly in producing tourism products (see <u>figure 1</u>) and measuring the cumulative value added these purchases generate.

For example, the intermediate purchases of the 'accommodation' and 'food and beverage services' industries include items such as electricity, bedding, and food purchased from other industries or imports. In turn, these other industries will have made intermediate purchases from other industries (or from overseas) to produce the items they sell to the accommodation, and food and beverage services industries. So the sequence continues, until all intermediate purchases can be directly accounted for, either as value added or imports.

Measuring indirect tourism's contribution to GDP involves summing the value added of each industry that is generated throughout this sequence. The New Zealand TSA covers the intermediate consumption related to direct tourist expenditure. Total tourism expenditure can be explained in terms of:

- direct tourism value added
- indirect tourism value added
- imports (those directly sold to tourists and those used indirectly in production)
- GST.

Note that some of tourism's indirect demand for intermediate inputs will not be met by the output of New Zealand producers, but by imports that provide no direct contribution to New Zealand's GDP. For more information, refer to Quarterly gross domestic product: Sources and methods (fourth edition) (Stats NZ, 2014).

Direct tourism value added does not necessarily show the same movement as tourism expenditure. This is because changes in expenditure patterns flow through into the composition of industries that supply products consumed by tourists.

Changing industry composition flows through into other economic aggregates. This can lead to a result where the different industries that contribute to tourism have varying value added to output ratios.

Movements in the value of imports sold directly to tourists and in imports used in the production of goods and services sold to tourists are strongly influenced by exchange rate variations and changes in the mix of products purchased.

Table 15 summarises the relationships between the various components of tourism expenditure. In the year ended March 2018, these imports increased 7.3 percent, and direct tourism value added increased 7.9 percent.

Table 15

Tourism expenditure by component⁽¹⁾
Year ended March 2015–18

	Year ended March											
	2015 2016 2017 2018P 2016 2017											
		\$(m	Annual p	percentage	change							
Direct tourism value added	12,664	14,443	14,698	15,852	14.0	1.8	7.9					
Indirect tourism value added	8,828	10,078	10,300	11,109	14.2	2.2	7.9					
Imports sold to tourists(2)	7,527	7,615	7,924	8,500	1.2	4.1	7.3					
GST paid on purchases by tourists	2,921	3,315	3,409	3,684	13.5	2.8	8.1					
Total tourism expenditure	31,940 35,451 36,331 39,145 11.0 2.5											

^{1.} Individual figures may not sum to stated totals due to rounding.

Note: Figures for all years prior to 2018 have been revised.

Symbol:

P provisional

^{2.} Imports used in production of goods and services sold to tourists; imports sold directly to tourists by retailers.

Tourism expenditure can also be presented by the share of each component, as shown in table 16 for the years ended March 2015–18.

Table 16
Share of tourism expenditure by component⁽¹⁾
Year ended March 2015–18

-	Year ended March									
	2015	2016	2017	2018P						
	Percent									
Direct tourism value added	39.6	40.7	40.5	40.5						
Indirect tourism value added	27.6	28.4	28.4	28.4						
Imports sold to tourists (2)	23.6	21.5	21.8	21.7						
GST paid on purchases by tourists	9.1	9.4	9.4	9.4						
Total tourism expenditure	100.0	100.0	100.0	100.0						

^{1.} Individual figures may not sum to stated totals due to rounding.

Note: Figures for all years prior to 2018 have been revised.

Symbol:

P provisional

^{2.} Imports used in production of goods and services sold to tourists; imports sold directly to tourists by retailers.

Tourism employment

Direct tourism employment adds another dimension to measuring the role of tourism in the New Zealand economy, focusing on tourism's impact on employment.

Table 17 shows the number of people directly employed in tourism, grouped by employees, and working proprietors.

Employment is derived from Linked Employer-Employee Data (LEED) annual statistics. The tourism satellite account uses the main earnings source, by industry measure, which allocates a person to the industry they have generated the most earnings from in a tax year.

Table 17
Direct tourism employment⁽¹⁾⁽²⁾⁽³⁾
Year ended March 2015–18

	Year ended March									
	2015	2016	2017	2018P	2016	2017	2018P			
		Number Annual pe								
Total employment										
Employees	2,038,338	2,098,926	2,173,014	2,224,017	3.0	3.5	2.3			
Working proprietors	416,301	421,356	428,868	472,251	1.2	1.8	10.1			
Number of people employed	2,454,636	2,520,282	2,601,882	2,696,268	2.7	3.2	3.6			
Tourism employment										
Tourism employees	168,621	184,812	184,803	186,618	9.6	0.0	1.0			
Tourism w orking proprietors	24,483	26,424	25,806	29,394	7.9	-2.3	13.9			
Number of people directly employed in tourism	193,110	211,242	210,606	216,012	9.4	-0.3	2.6			
	Per	cent								
Number of people directly employed in tourism as a percentage of the total number of people employed	7.9	8.4	8.1	8.0						

- 1. Individual figures in this table have been rounded, and discrepancies may occur between sums of components and totals.
- 2. Total employment numbers are sourced from Linked Employer-Employee Data.
- 3. Percentage calculations are from unrounded employment numbers.

Note: Figures for all years prior to 2018 have been revised.

Symbols:

P provisional

... not applicable

Points to note from table 17:

- 216,012 people were directly employed in tourism in the year ended March 2018, an increase of 2.6 percent from the previous year.
- Direct tourism employment increased 11.9 percent between 2015 and 2018. The total number of people employed in New Zealand increased 9.8 percent over the same period.
- The number of people employed in tourism does not necessarily correlate with movements in total tourism expenditure or direct value added. In 2018, for example, direct tourism value added increased 7.9 percent, while the number of people employed directly in tourism increased 2.6 percent. This difference may be the result of several factors including:
 - o a lag between growth in a given industry and decisions to employ new staff
 - o a shift in the number of hours worked, or output for each person employed.

We use tourism industry ratios to allocate tourism employment numbers by industry. This treatment assumes that, for each industry, a given dollar value of output will require a fixed quantity of labour input, regardless of whether the products are purchased by tourists or non-tourists.

Tourism industry profitability

Measuring tourism industry profitability allows for more in-depth alternative analysis of the tourism sector. This measure provides time-series data on variables at an industry level, allowing comparison across time, within an existing industry, and across industries.

Table 18 and figure 12 show gross operating surplus and gross mixed income as a percentage of total tourism output for tourism industries and for all non-tourism-related industries. It is one measure of tourism profitability, but reflects economic rather than accounting concepts. Data is presented up until the latest balanced supply and use year.

Gross operating surplus and gross mixed income is before the deduction of interest and economic depreciation.

Table 18

Tourism gross operating surplus and gross mixed income as a percentage of total tourism output⁽¹⁾⁽²⁾

Year ended March 2013-17

		Ye	ear ended Marc	h						
Industry	2013	2014	2015	2016	2017					
	Percent									
Tourism-characteristic industries										
Accommodation	20.9	22.4	22.6	23.2	23.2					
Food and beverage services	14.3	14.3	14.3	14.2	14.7					
Road, rail, and water transport ⁽³⁾	14.4	12.7	15.4	15.9	16.3					
Air and space transport	11.8	11.7	15.3	20.5	19.3					
Other transport, transport support, and travel and tour services	19.0	21.6	19.9	22.0	24.2					
Rental and hiring services	40.3	41.4	41.1	43.6	45.3					
Arts and recreation services	22.4	21.5	22.3	21.6	21.3					
Total tourism-characteristic industries	17.5	18.1	19.2	21.3	21.5					
Tourism-related industries										
Retail trade	22.1	22.8	22.3	22.2	24.6					
Education and training	15.4	16.0	16.7	16.9	16.6					
All non-tourism-related industries	22.3	22.6	25.9	26.8	25.3					
Total industry	19.3	19.8	21.4	22.9	22.8					

Tourism gross operating surplus and gross mixed income as a percentage of gross output is considered to be an indicator of tourism profitability.

Note: Figures for all years prior to 2017 have been revised.

^{2.} Individual figures may not sum to stated totals due to rounding.

^{3.} Road, rail, and water transport are combined for confidentiality reasons.

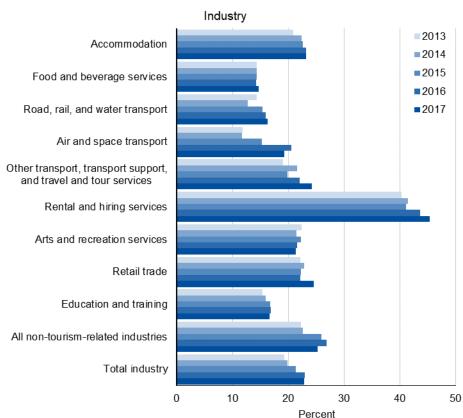
Points to note from table 18:

- The profitability of total tourism-characteristic industries for the year ended March 2017 increased 0.2 percentage points compared with the year ended March 2016.
- Only the tourism-characteristic industries of 'air and space transport' and 'arts and recreation services' had a lower profitability ratio than in 2016.
- The only broad tourism industry category with lower profitability ratios in the year ended March 2017 compared with the year ended March 2013 was 'arts and recreation services', down 1.1 percentage points.

Figure 12

Tourism gross operating surplus and gross mixed income as a percentage of total tourism output

Year ended March 2013-17



Detailed tables, year ended March 2017

Tables 19–26 in this chapter provide details of the tourism satellite account for the year ended March 2017, the latest year for which balanced supply and use tables are available.

You can download the tables in Excel format from the Stats NZ website (www.stats.govt.nz).

Tables

- 19 Tourism expenditure, by type of product and type of tourist, year ended March 2017
- <u>20 New Zealand System of National Accounts production accounts, by industry, year ended March</u> <u>2017</u>
- 21 Sales by type of product and industry, year ended March 2017
- 22 Derivation of tourism product ratios, year ended March 2017
- 23 Derivation of tourism industry ratios, year ended March 2017
- 24 Derivation of direct tourism value added, year ended March 2017
- 25 Direct tourism employment, by industry, year ended March 2017
- 26 Gross fixed capital formation and net capital stock, by industry, year ended March 2017

Detailed tables for the year ended March 2018 will be available in *Tourism satellite account: 2019*, to be published in December 2019 on www.stats.govt.nz.

Table 19 Tourism expenditureBy type of product and type of tourist⁽¹⁾⁽²⁾
Year ended March 2017

		Domestic deman	d		
Product	Business demand	Government demand	Household demand	International demand	Total demand
			\$(million)		ı
Tourism-characteristic products					
Accommodation services	417	166	695	1,612	2,890
Food and beverage serving services	308	103	1,462	2,335	4,209
Road, rail, and water passenger transport ⁽³⁾	185	53	433	461	1,132
Air passenger transport	958	460	1,277	2,281	4,976
Travel agency services	407	145	416	351	1,320
Motor vehicle hire or rental	617	203	466	272	1,557
Imputed rental on holiday homes	0	0	781	0	781
Libraries, archives, museums, and other					
cultural services	0	0	96	102	199
Other sport and recreation services	0	0	315	208	524
Total tourism-characteristic products	2,893	1,129	5,941	7,623	17,587
Tourism-related products					
Retail sales - alcohol	0	0	661	91	752
Retail sales - clothing and footwear	0	0	1,168	593	1,761
Retail sales – food, beverages, tobacco, and					
other groceries	0	0	1,217	315	1,532
Retail sales – fuel and other automotive					
products	434	227	610	621	1,892
Retail sales - retail medicines, toiletries	0	0	500	116	615
Retail sales - tourism consumer durables	0	0	1,451	244	1,695
Retail sales - other shopping	0	0	1,476	1,556	3,032
Financial services	21	2	1	4	28
General insurance (incl travel insurance)	56	7	68	71	201
Social and health-related services	0	0	649	85	734
Gambling services	0	0	221	78	300
Education services	0	0	284	594	878
Other tourism-related services	148	42	350	1,230	1,770
Other personal services	0	0	123	21	144
Total tourism-related products	658	278	8,780	5,619	15,336
Total tourism demand excluding GST	3,552	1,407	14,721	13,242	32,922
GST paid on purchases by tourists	5	1	1,875	1,527	3,409
Total tourism expenditure	3,557	1,409	16,597	14,769	36,331

^{1.} Individual figures may not sum to stated totals due to rounding.

^{2.} All values are in producers' prices.

^{3.} Road, rail, and water passenger transport are combined for confidentiality reasons.

Table 20 New Zealand System of National Accounts production accountsBy industry⁽¹⁾⁽²⁾
Year ended March 2017

			Tourism-cl	naracterist		Tourism-related industries		All non-			
	Accom- modation	Food and beverage services	Road, rail, and water transport	Air and space transport	Other transport, transport support, and travel and tour services	Rental and hiring services	Arts and recreation services	Retail trade	Education and training	tourism- related indust- ries	Total industry
							•				
Published GDP											269,857
Less GST, import duties, and other taxes on production											23,452
Contribution to GDP from production	1,756	4,210	4,422	2,398	4,961	2,536	3,685	12,285	11,846	198,306	246,405
Equivalent to total output	3,659	,	9,887	5,772	,	4,270	,	19,998	,	431,363	514,646
Less intermediate consumption	1,903	4,757	5,465	3,374	2,189	1,733	3,487	7,713	4,562	233,058	268,241
Components of GDP	077	2 020	2.204	4.000	4.040	500	4 757	7 4 0 7	0.001	07.400	445 740
Compensation of employees Gross operating surplus and	877	,	2,384	1,262	,	568	1,757	7,187	,	87,423	115,718
gross mixed income	850	,	1,601	1,116	3,062	1,933	1,565	5,010	,	99,849	118,470
Taxes on production and imports Less subsidies	31 1	59 8	800 364	20 0	81 1	36 1	387 24	100 11	87 7	11,508 474	13,109 892

^{1.} Individual figures may not sum to stated totals due to rounding.

Symbol:

... not applicable

^{2.} All values are in producers' prices.

^{3.} Road, rail, and water transport are combined for confidentiality reasons.

Table 21
Sales by type of product and industry⁽¹⁾⁽²⁾
Year ended March 2017

		To	ourism-ch	aracteris	tic industrie	es			related stries			
Product	Accom- mod- ation	Food and beve- rage serv- ices	Road, rail, and water trans- port ⁽³⁾	Air and space trans- port	Other transport, transport support, and travel and tour services	Rental and hiring serv- ices	Arts and recreat- ion serv- ices	Retail trade	Education and training	All non- tourism- related indust- ries	Imports	Total industry (supply)
Sales of tourism-characteristic						•	,					
products												
Accommodation services	1,890	391	0	0	2	0	93	0	423	124	0	2,92
Food and beverage serving services	1,270	7,097	21	0		1	416	296	190	536	0	9,89
Road, rail, and water passenger transport ⁽⁴⁾	37	0		0		1	4	1	38	34	0	2,07
Air passenger transport	0	0	,	4,966		0	0	1	58	4	0	5,030
Travel agency services	14	0		27		3	12	0	2	39	0	1,33
Motor vehicle hire or rental	0	0		145	,	1,961	0	12	0	247	0	2,39
Imputed rental on holiday homes	0	0		0		0	0	0	0	781	0	78
Libraries, archives, museums, and other	3	U	0	O	O	Ü	3	Ū	O	, , ,	0	.0
cultural services	0	0	0	0	0	0	413	0	37	30	0	479
Other sport and recreation services	42	0		0		53	1,462	0	37	110	0	1,72
•							,					,
Total tourism-characteristic products	3,253	7,488	1,673	5,138	1,666	2,019	2,399	309	785	1,904	0	26,63
Sales of tourism-related products												
Retail sales - alcohol	303	744	0	0		0	1	244	0	,	593	6,770
Retail sales - clothing and footwear	0	0	0	0	0	0	0	1,936	9	992	2,785	5,72
Retail sales - food, beverages, tobacco,			_	_	_		_		_			
and other groceries	27	508	0	0	5	0	0	4,541	0	44,222	5,455	54,75
Retail sales - fuel and other automotive								700			0045	
products	0	0	3	0		0	0	793	0	6,255	2,845	9,89
Retail sales - retail medicines, toiletries	0	5	0	0		0	0	1,178	0	2,575	2,341	6,098
Retail sales - tourism consumer durables	0	0		0		0	0	3,268	1	6,369	9,986	19,625
Retail sales – other shopping	0	0		0		231	24	5,163	71	7,807	7,266	20,56
Financial services	0	0		0		0	0	3	1	3,659	0	3,66
General insurance (incl travel insurance)	0	0	0	0		0	0	0	0	4,811	0	4,812
Social and health-related services	0	0	0	0		0	7	0	3	10,867	0	10,878
Gambling services	0	11	0	0		0	2,169	0	0	16	0	2,19
Education services	0	0		9		0	1	0	5,385	710	0	6,112
Other roughest annihing	0	4	67 0	6		16 10	4	451 0	19 0	25,403 1,906	0	26,220 1,910
Other personal services	U	U	U	Ü	U	10	U	U	U	1,906	U	1,910
Total tourism-related products	330	1,271	72	15	265	256	2,206	17,578	5,489	120,477	31,270	179,230
Sales of all domestically produced												
non-tourism-related products	75	207	8,143	618	5,219	2,007	2,563	2,111	10,135	293,846		324,924
Total sales	3,658	8,967	9,888	5,772	7,150	4,282	7,168	19,998	16,409	416,228	31,270	530,789
Other output items	1	0	-1	0	1	-12	5	0	-2	15,136		15,127
Less imports of tourism-related products (5)											31,270	31,27
	3,659	8,967	9,887	5,772	7,150	4,270	7 470	19,998	16 407	431,363		514,646

^{1.} Individual figures may not sum to stated totals due to rounding.

Symbol:

... not applicable

^{2.} All values are in producers' prices.

^{3.} Road, rail, and water transport are combined for confidentiality reasons.

^{4.} Road, rail, and water passenger transport are combined for confidentiality reasons.

^{5.} Imports of tourism-related products are subtracted from total sales, as this relates to goods not produced in New Zealand.

Table 22

Derivation of tourism product ratios⁽¹⁾⁽²⁾
Year ended March 2017

Product	Total demand (from table 19)	Total supply (from table 21)	Tourism product ratio ⁽³⁾
	φ(ιιιιι	1011)	<u> </u>
Tourism-characteristic products	2,890	2,924	0.99
Accommodation services	4,209	2,924 9,899	0.99
Food and beverage serving services	4,209 1,132	2,073	0.43
Road, rail, and water passenger transport ⁽⁴⁾	4,976	2,073 5,030	0.99
Air passenger transport	•	•	0.99
Travel agency services	1,320	1,335	0.99
Motor vehicle hire or rental	1,557	2,390	
Imputed rental on holiday homes	781	781	1.00
Libraries, archives, museums, and other cultural	199	479	0.41
services	524	_	0.41
Other sport and recreation services	_	1,724	0.30
Total tourism-characteristic products	17,587	26,635	•••
Tourism-related products			
Retail sales – alcohol	752	6,770	0.11
Retail sales – clothing and footwear	1,761	5,722	0.31
Retail sales - food, beverages, tobacco, and other			
groceries	1,532	54,757	0.03
Retail sales - fuel and other automotive products	1,892	9,897	0.19
Retail sales - retail medicines, toiletries	615	6,098	0.10
Retail sales – tourism consumer durables	1,695	19,625	0.09
Retail sales – other shopping	3,032	20,564	0.15
Financial services	28	3,664	0.01
General insurance (incl travel insurance)	201	4,812	0.04
Social and health-related services	734	10,878	0.07
Gambling services	300	2,196	0.14
Education services	878	6,112	0.14
Other tourism-related services	1,770	26,220	0.07
Other personal services	144	1,916	0.08
Total tourism-related products	15,336	179,230	
Total tourism demand excluding GST	32,922	205,865	
GST paid on purchases by tourists	3,409		
Total tourism expenditure	36,331		

^{1.} Individual figures may not sum to stated totals due to rounding.

${\bf Symbol:}$

... not applicable

^{2.} All values are in producers' prices.

^{3.} Tourism product ratios show n in this table may differ at the industry level for some products from the ratios used to derive tourism supply in table 23. Supply is calculated at a more detailed level than the level presented in other tables.

^{4.} Road, rail, and water passenger transport are combined for confidentiality reasons.

Table 23

Derivation of tourism industry ratios⁽¹⁾⁽²⁾
Year ended March 2017

		Tour	ism-char	acteristi	c industries	3		Tourism-related industries		All non- tourism-	
Product	Accom- modation	Food and beve- rage services	Road, rail, and water trans- port ⁽³⁾	Air and space trans- port	Other transport, transport support, and travel and tour services	Rental and hiring serv- ices	Arts and recrea- tion serv- ices	Retail trade	Educa- tion and training	related industries; imports sold directly to tourists by retailers (4)	Total industry (tourism supply)
						\$(million)				
Tourism-characteristic products											
Accommodation services	1,868	387	0	0	2	0	92	0	419	123	2,890
Food and beverage serving services	549	3,009	9	0	33	0	190	115	83	221	4,209
Road, rail, and water passenger transport ⁽⁵⁾	18	0	821	0	254	1	2	0	19	17	1,132
Air passenger transport	0	0	0	4,913	1	0	0	1	57	4	4,976
Travel agency services	14	0	1	27	1,222	3	12	0	2	38	1,320
Motor vehicle hire or rental	0	0	11	95	5	1,278	0	8	0	161	1,557
Imputed rental on holiday homes	0	0	0	0	0	0	0	0	0	781	781
Libraries, archives, museums, and other											
cultural services	0	0	0	0	0	0	171	0	15	12	199
Other sport and recreation services	13	0	0	0	6	16	443	0	11	34	524
Total tourism-characteristic products											
purchased by tourists	2,461	3,396	842	5,034	1,524	1,298	911	123	606	1,391	17,587
Tourism-related products											
Retail sales - alcohol	58	141	0	0	0	0	0	54	0	498	752
Retail sales - clothing and footwear	0	0	0	0	0	0	0	707	2	1,052	1,761
Retail sales - food, beverages, tobacco,											
and other groceries	7	70	0	0	0	0	0	270	0	1,186	1,532
Retail sales - fuel and other automotive											
products	0	0	1	0	0	0	0	246	0	1,645	1,892
Retail sales - retail medicines, toiletries	0	1	0	0	0	0	0	218	0	397	615
Retail sales - tourism consumer durables	0	0	0	0	0	0	0	325	0	1,370	1,695
Retail sales - other shopping	0	0	0	0	0	32	20	865	32	2,083	3,032
Financial services	0	0	0	0	0	0	0	0	0	28	28
General insurance (incl travel insurance)	0	0	0	0	0	0	0	0	0	201	201
Social and health-related services	0	0	0	0	0	0	1	0	0	734	734
Gambling services	0	1	0	0	0	0	297	0	0	2	300
Education services	0	0	0	1	2	0	0	0	662	213	878
Other tourism-related services	0	0	7	1	20	1	0	73	5	1,663	1,770
Other personal services	0	0	0	0	0	1	0	0	0	144	144
Total tourism-related products											
purchased by tourists	65	213	8	2	22	33	318	2,758	702	11,215	15,336
Direct tourism sales	2,526	3,609	851	5,035	1,545	1,332	1,229	2,882	1,307	12,606	32,922
Total industry output	3,659	8,967	9,887	5,772	7,150	4,270	7,172	19,998	16,407	431,363	514,646
Tourism industry ratio	0.69	0.40	0.09	0.87	0.22	0.31	0.17	0.14	0.08	0.02	

^{1.} Individual figures may not sum to stated totals due to rounding.

Symbol:

... not applicable

^{2.} All values are in producers' prices.

^{3.} Road, rail, and water transport are combined for confidentiality reasons.

^{4.} The 'all non-tourism-related industries' ratio is calculated exclusive of imports sold directly to tourists by retailers.

^{5.} Road, rail, and water passenger transport are combined for confidentiality reasons.

Table 24 Derivation of direct tourism value added⁽¹⁾⁽²⁾
Year ended March 2017

		To	ourism-ch	naracter	istic industri	es			n-related stries			
	Accom- moda- tion	Food and beve- rage serv- ices	Road, rail, and water trans- port ⁽³⁾	Air and space trans- port	Other transport, transport support, and travel and tour services	Rental and hiring serv- ices	Arts and recrea- tion serv- ices	Retail trade	Education and training	All non- tourism- related industries	Total industry	
\$(million)												
Tourism industry ratio Direct tourism value added	0.69 1,212	0.40 1,694	0.09 372	0.87 2,092	0.22 841	0.31 791	0.17 625	0.14 1,735		0.02 4,449	 14,698	
Equivalent to tourism output	2,526	3,609	851	5,035	1,545	1,332	1,229	2,882	1,307	8,925	29,242	
Less tourism intermediate consumption	1,314	1,915	479	2,943	704	541	604	1,146	422	4,476	14,544	
Contribution to GDP from production											246,405	
				Percer	nt							
Direct tourism value added as a percentage of total industry contribution to GDP											6.0	
			;	\$(millio	n)							
Components of direct tourism value added												
Tourism compensation of employees	605	1,143	199	1,101	453	177	300	1,013	661	1,632	7,284	
Tourism gross operating surplus and gross mixed income	587	531	139	974	374	603		710		,	6,657	
Tourism taxes on production and imports Less tourism subsidies	21 1	24 3	59 26	17 0	14 0	11 0	67 3	14 2		567 9	803 46	

^{1.} Individual figures may not sum to stated totals due to rounding.

Symbol:

... not applicable

^{2.} All values are in producers' prices.

^{3.} Road, rail, and water transport are combined for confidentiality reasons.

Table 25 Direct tourism employmentBy industry⁽¹⁾⁽²⁾

Year ended March 2017

		To	ourism-ch	aracteris	tic industri	es		Tourism				
	Accom- moda- tion	Food and beverage services	Road, rail, and water trans- port ⁽³⁾	Air and space trans- port	Other transport, transport support, and travel and tour services	Rental and hiring services	Arts and recrea- tion services	Retail trade	Educat- ion and training	All non- tourism- related indust- ries	Total industry	
Number												
Total employment	35,271	135,333	44 707	11.010	28,254	11 402	20 602	214.069	189,819	1 466 404	2,173,014	
Employees Working proprietors	4,137	14,586	41,727 8,973	11,019 204	,	11,403 2,355	39,693 8,541	214,068 25,350	7,974	1,466,424 353,130	428,868	
Number of people employed	39,408	149,919	50,700	11,223	31,878	13,755	48,234	239,421	197,793	1,819,554	2,601,882	
Tourism industry ratio ⁽⁴⁾	0.69	0.40	0.09	0.87	0.22	0.31	0.17	0.14	0.08	0.02		
Tourism employment Tourism employees	24,348	54,468	3,414	9,615	9,027	3,555	6,834	29,979	12,591	30,969	184,803	
Tourism w orking proprietors	2,856	,	675	177	2,142	735	1,341	3,723	1,269	7,014	25,806	
Number of people directly employed in tourism	27,207	60,336	4,092	9,789	11,172	4,293	8,178	33,702	13,857	37,980	210,606	
				Percei	nt							
Number of people directly employed in tourism as a percentage of the total number of people employed (5)											8.1	
				\$(millio	on)							
Total employment earnings ⁽⁶⁾ Employees Working proprietors	903 181	2,853 584	2,265 389	C		495 133	1,582 320	7,003 1,329	9,409 314	C C	106,044 26,284	
Total earnings	1,084	3,437	2,654	С	1,829	628	1,902	8,331	9,724	С	132,328	

- 1. Individual figures in this table have been rounded, and discrepancies may occur between sums of components and totals.
- $2. \ Total\ employment\ numbers\ by\ industry\ are\ sourced\ from\ Linked\ Employer-Employee\ Data.$
- 3. Road, rail, and water transport are combined for confidentiality reasons.
- 4. The tourism industry ratio is sourced from table 24.
- $5.\ \ Percentage\ is\ calculated\ from\ unrounded\ employment\ numbers.$
- 6. Total employment earnings by industry are sourced from Linked Employer-Employee Data. A person is assigned to the industry where they have generated the most earnings from in the tax year.

Symbols:

... not applicable

 $C\,confidential$

Table 26
Gross fixed capital formation and net capital stock

By industry $^{(1)(2)(3)(4)}$

Year ended March 2017

			Tourism-cha	aracteristic	industries					
	Accom- modation	Food and beverage services	Road, rail, and water transport ⁽⁵⁾	Air and space transport	Other transport, transport support, and travel and tour services	Rental and hiring services	Arts and recreation services		All other industries	Total industry
		•	•	•						
Gross fixed capital formation										
Asset type										
Residential buildings	0	0	0	0	0	-1	3	2	20,141	20,143
Non-residential buildings	234	105	69	38	315	434	203	1,397	6,439	7,837
Other construction	0	0	42	0	2,936	0	62	3,040	3,313	6,353
Land improvement(7)	2	1	0	0	2	3	48	56	783	838
Transport equipment	22	39	881	76	119	1,655	27	2,818	2,879	5,697
Plant, machinery, and equipment	98	171	151	43	703	566	200	1,932	10,107	12,039
Intangible assets	18	29	38	13	70	45	102	315	8,492	8,806
Total gross fixed										
capital formation	374	345	1,181	170	4,144	2,701	644	9,560	52,153	61,713

Total net capital stock

7,901

Net capital stock

2,351

10,892

11,163

100,637 690,152

790,790

59,256

3,956

5,118

^{1.} Individual figures may not sum to stated totals due to rounding.

^{2.} All values are in purchasers' prices.

^{3.} Gross fixed capital formation by industry and asset type and net capital stock by industry were used as a basis for calculating the table.

^{4.} Gross fixed capital formation by industry and asset type presented here excludes weapons systems.

^{5.} Road, rail, and water transport are combined for confidentiality reasons.

^{6.} The 'all other industries' column includes all tourism-related and non-tourism-related industries.

^{7.} Land improvement is shown in gross fixed capital formation, but does not form a part of net capital stock.

Glossary

National accounts definitions

Basic prices

The amounts receivable by producers from purchasers for units of goods or services produced as outputs minus any taxes payable, and plus any subsidies receivable. They exclude any transport charges invoiced separately by the producers.

Change in inventories

The book value change as recorded in most business accounting records, less an inventory valuation adjustment that removes the capital gains and losses that may arise through holding inventories purchased at prices either higher or lower than those ruling during the period of account. Change in inventories effectively values the change in stocks at the average prices for the period.

Compensation of employees

Total remuneration, in cash or in kind, payable by enterprises to employees. Includes contributions paid on employees' behalf to superannuation funds, private pension schemes, the Accident Compensation Corporation, casualty and life insurance schemes, and other fringe benefits.

Consumption of fixed capital

The reduction in the value of the fixed assets used in production during the accounting period resulting from physical deterioration, normal obsolescence, or accidental damage. It is valued at replacement cost.

Exports of goods and services

All goods and services produced by New Zealand residents and purchased by non-residents.

Gross domestic product (GDP)

The total market value of goods and services produced in New Zealand after deducting the cost of goods and services used in the process of production, but before deducting allowances for the consumption of fixed capital.

Gross fixed capital formation

The total value of a producer's purchases, less disposals, of durable real assets such as buildings, motor vehicles, plant and machinery, hydroelectric construction, roading, and improvements to land. Land is excluded from gross fixed capital formation. Included is the value of construction work done by a firm's own employees. The term 'gross' indicates that consumption of fixed capital has not been deducted from the value of the outlays.

Gross mixed income

The operating surplus of closely-held or unincorporated business, which contains an element of labour remuneration that cannot be separately identified from the return on capital to the owner. In the TSA, gross mixed income is included in the total, gross operating surplus and gross mixed income, and is not separately identified.

Gross operating surplus

Output at producer's values less the sum of intermediate consumption, compensation of employees, and taxes on production and imports net of subsidies. It is approximately equal to accounting profit before deducting depreciation, direct taxes, dividends, interest paid, and bad debts, and before adding interest and dividends received. In the TSA, gross operating surplus is included in the total, gross operating surplus and gross mixed income, and is not separately identified.

Gross operating surplus and gross mixed income

This represents the sum of gross operating surplus and gross mixed income.

GST on production

The transactions of registered producers are recorded excluding goods and services tax (GST), while those of final consumers (including producers of exempt goods and services) are recorded at actual market prices. The potential imbalance between the value of goods and services produced and the value ultimately consumed is removed by including the item 'GST on production' in the GDP account. This item produces a measure of the amount of GST included in the valuation of the final demand categories. Note that not all purchases by tourists attract GST, for example, airfares purchased abroad by international tourists.

Imports of goods and services

All goods and services produced by non-residents and purchased by New Zealand residents.

Intermediate consumption

The value of non-durable goods and services used in production. Valuation is at purchaser's values.

Net capital stock

The accumulated written-down value of fixed assets valued in current prices. It is equal to accumulated investment less retirements and less accumulated depreciation for assets still operating.

Output

Goods and services produced within an establishment that become available for use outside that establishment, plus any goods and services produced for own final use.

Producer prices

The amount receivable by the producer from the purchaser for a unit of goods or a service produced as output less any deductible taxes invoiced to the purchaser. The producer price excludes any transport charges invoiced separately by the producer.

Purchaser prices (market prices)

The amount paid by the purchaser, exclusive of any deductible taxes, to take delivery of goods or services at the time and place required by the purchaser. The purchaser price of goods includes any transport charges paid separately by the purchaser to take delivery at the required time and place.

Subsidies

Current unrequited payments made by governments to enterprises based on the levels of their production activities or the quantities or values of the goods and services they produce, sell, or import.

Taxes on production and imports

Taxes assessed on producers in respect of the production, sale, purchase, and use of goods and services, and that add to the market prices of those goods and services. This includes sales tax, local authority rates, import and excise duties, fringe benefits tax, and registration fees, such as motor vehicle registration, paid by producers.

Value added

The value added to goods and services by the contributions of capital and labour (ie, after the costs of bought-in materials and services have been deducted from the total value of output).

Abbreviations used in this report

ANZSIC06: 2006 Australian and New Zealand Standard Industrial Classification

BoP: balance of payments
CPI: consumers price index
DTS: Domestic Travel Survey
EMS: employer monthly schedule
GDP: gross domestic product
GST: goods and services tax

HLFS: household labour force survey

HTEE: Household Tourism Expenditure Estimates

IVS: International Visitor Survey

LEED: Linked Employer-Employee Data

MBIE: Ministry of Business, Innovation and Employment **NZSNA**: New Zealand System of National Accounts

OECD: Organisation for Economic Co-operation and Development

TSA: tourism satellite account

UNWTO: United Nations World Tourism Organization

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Appendix 1: Conceptual framework

Definitions

Tourism satellite account: 2018 is based on the methodology produced by the United Nations World Tourism Organization (UNWTO) in its publication Tourism satellite account: Recommended methodological framework 2008.

This method is approved by the United Nations Statistical Commission and the methodological publications of the Organisation for Economic Co-operation and Development (OECD). These organisations have collaborated to produce guidelines for tourism satellite accounts (TSAs). Although the organisations may differ slightly in their recommended treatment of some conceptual issues, they generally take a similar approach based on the international standard *System of national accounts 2008*.

Definitions used in *Tourism satellite account: 2018* are based on the recommendations of the UNWTO, with some modification for New Zealand purposes.

Tourist

A tourist is any person travelling to a place other than their usual environment for less than 12 months and whose main purpose is other than the exercise of an activity remunerated from within the place visited.

Not all travellers (people moving from one place to another) are tourists. To be defined as a tourist, a person must also be travelling to places outside their usual environment (defined below) for a limited time. The 12-month time limit is consistent with the guideline in *System of national accounts 2008*, which is that a person staying in a country for longer than 12 months is a resident. A place becomes part of a tourist's usual environment after the tourist has spent more than 12 months there.

The following people are not considered tourists:

- those, such as travelling salespeople, for whom travel is an intrinsic part of their job
- those who travel for the purpose of being admitted to, or detained in, a residential facility, such as a hospital, prison, or long-stay care
- those travelling as part of a shift to a new permanent location
- those undertaking military duties
- those travelling between two parts of their usual environment.

The New Zealand TSA covers only tourists who travel to or within New Zealand. These are classified as either domestic or international tourists. The domestic tourist group is further broken down according to household, business, or government travel.

Domestic tourist

A domestic tourist is a New Zealand resident who travels within New Zealand but outside their usual environment. While travelling, they do not stay in any one place for more than 12 months.

 A domestic household tourist is a domestic tourist whose purpose of visiting is other than to carry out a business activity.

- A domestic business tourist is a domestic tourist and an employee of a private sector enterprise whose purpose of travel is to carry out a business activity and whose expenses are met either in full or in part by their employer.
- A domestic **government** tourist is a domestic tourist and an employee of a central or local government sector enterprise whose purpose of travel is to carry out a business activity and whose expenses are met either in full or in part by their employer.

International tourist

An international tourist is a person who travels to a country other than that in which they have their usual residence, and outside their usual environment. While travelling, they do not stay in any one place for more than 12 months.

For the purposes of a TSA, international tourists are exclusively inbound travellers (non-residents travelling in New Zealand). International students studying in New Zealand for less than 12 months are included in the scope of the TSA. All their expenditure – airfares, tuition fees, and accommodation and living expenses – are included in international tourism expenditure.

International students studying in New Zealand for more than 12 months are excluded from the TSA because they are considered to be residing in their usual environment within New Zealand. Such students are treated as tourists only if they travel outside their usual environment within New Zealand. However, in practice, it is difficult to estimate this expenditure, and it is therefore excluded.

Usual environment

Usual environment is the place or places a person occupies within their regular routine of life (except places visited for leisure or recreational activities only).

It is the concept of 'usual environment' that defines a tourist. Individuals must be travelling outside their usual environment for their expenditure to be considered tourism.

A particular destination will benefit from the goods and services purchased by tourists travelling outside their usual environment, by the amount spent by the tourist at that location, excluding imports.

The important link between usual environment and tourism is that tourists, in purchasing goods and services outside their usual environment, have a positive economic impact on that destination. This benefit would not have occurred without tourism. This is the basis of tourism expenditure and is the reason a TSA excludes expenditure by outbound New Zealand travellers on foreign-produced goods and services. In other words, the economic benefits that accrue from these travellers do not benefit New Zealand.

However, expenditure by outbound tourists on domestically produced services (for example, international flights on New Zealand carriers, New Zealand travel agents' booking fees, or travel insurance for outbound trips) is included within the TSA because it is a form of tourism and provides economic benefit to the New Zealand economy.

The concept of usual environment is difficult to define because it depends on the nature of the country in question. For this reason, the UNWTO does not give a definitive definition. Instead, it suggests possible criteria to be used by countries to establish their own definition.

In New Zealand, for a tourist to be outside their usual environment they must, subject to previously stated exclusions, satisfy at least one of the following conditions:

travel by a scheduled flight or inter-island ferry service

- travel more than 40 kilometres from their residence (one way) and outside the area they commute to for work or visit daily
- travel as an international tourist.

Tourism expenditure

Tourism expenditure is spending by, or on behalf of, a tourist before, during, and after a trip. This expenditure occurs either on the trip (eg meals or souvenirs), or is travel related (eg pre-booked airfares, luggage, or other tourism-specific durables). The trip must be taken outside the usual environment of the tourist. This expenditure includes goods and services tax (GST).

Since tourists are defined based on their relationship to their usual environment, expenditure on a product may constitute tourism expenditure, depending on who is purchasing the product. Tourism expenditure is defined from the perspective of the tourist.

On-trip tourism expenditure is tourism expenditure occurring during a trip. Off-trip tourism expenditure is expenditure that occurs outside of a trip but relates to goods and services purchased specifically for use while on a trip.

Tourism demand

Tourism demand is GST-exclusive expenditure made by, or on behalf of, a tourist before, during, and after a trip. This expenditure occurs either on the trip or is travel related, and the trip must be taken outside the usual environment of the tourist. In other words, tourism demand is equivalent to tourism expenditure, excluding GST.

Tourism output

Tourism output is the value of goods and services purchased by tourists, excluding imports sold directly to tourists. It is derived from tourism demand by removing the imports sold directly to tourists by retailers and comprises the following components:

- tourism intermediate consumption the goods and services used in the process of production of products sold to tourists
- tourism value added the 'value' a producer adds to the raw material goods and services and/or transformed goods it purchases in the process of production.

Tourism intermediate consumption

Tourism intermediate consumption consists of goods and services used in the process of producing products sold to tourists.

Travel agents' commissions, even where these are paid by transport or accommodation providers to travel agents, are not included in tourism intermediate consumption. Instead, this expenditure is included in tourism demand (and in business travel expenditure) because it is assumed these commissions are paid to travel agents by transport or accommodation providers on behalf of tourists. Travel agents' commissions received directly from fares booked are also included in tourism demand.

Goods for resale

Goods for resale are goods acquired for the purpose of reselling and without further processing or transformation.

Valuation basis used in tourism satellite accounts

Tourism expenditure in TSAs is initially measured in purchasers' prices (market prices). Essentially, purchasers' prices are the amounts paid by tourists for products. Tourism expenditure is then converted into producers' prices and incorporated into the supply and use framework of the TSA. Producers' prices are the amounts producers receive for selling their products. For this reason, they are exclusive of GST. All monetary aggregates presented in a TSA are in producers' prices, unless otherwise stated.

Some valuation issues exist in comparing the New Zealand TSA with those of other countries. This is because the New Zealand System of National Accounts (NZSNA) and the TSA measure industry value added in producers' prices, while Australia and other countries measure industry value added in basic prices, or at factor cost. Consequently, international comparisons can be slightly misleading, as industry value added estimates can have a different valuation basis. (For definitions of basic, producer, and purchaser prices, see the glossary.)

It is important to emphasise that the direct tourism value added valuation is consistent with the value added generated by industries in the NZSNA, as direct tourism value added valuation is also measured in producers' prices.

Tourism products

The tourism product ratio

The tourism product ratio is the proportion of the total supply of a product or service that is consumed by tourists. It provides the means of classifying tourism products as outlined below.

Classifying products sold to tourists

TSAs make a distinction between three categories of products:

- A **tourism-characteristic** product is one that would cease to exist in meaningful quantity, or for which the level of consumption would be significantly reduced, in the absence of tourists. A product is classified as a tourism-characteristic product if at least 25 percent of its production is purchased by tourists.
- A **tourism-related** product is distinct from a tourism-characteristic product in that tourists consume a smaller proportion of the total supply of the product. For a product to be classified as a tourism-related product, tourists must purchase up to 25 percent of its production. However, 'Retail sales clothing and footwear', which exceeds the 25 percent of production threshold, is categorised alongside fellow tourism-related retail commodities, because the activity undertaken specifically relates to retail.

Note: a tourism-specific product is either a tourism-characteristic product or a tourism-related product.

• A **non-tourism-related** product is a product that is not tourism-specific. It is assumed in the New Zealand TSA that none of these products are purchased by tourists.

A full list of tourism-characteristic and tourism-related products is found in <u>table 27</u>, Appendix 3: Tourism product classification.

The criteria for categorising products are derived from the UNWTO's recommended treatment, while the product classification used is based on the Australian and New Zealand Standard Commodity Classification.

When looking at product classifications, the following points are important to consider:

- The main purpose of making the distinction between categories of products is for presentational and analytical purposes. It allows analysis to be specifically focused on products that make up the majority of tourism expenditure.
- Tourism products are not exclusively consumed by tourists. A non-tourist can consume a
 tourism-characteristic product. Rather than providing a robust set of products consumed
 exclusively by tourists, tourism product classifications provide a way of identifying an
 industry's supply of products consumed by tourists.

Note that constraints on the availability of input data for provisional accounts mean that a regrouping of tourism-characteristic and tourism-related products is necessary. (See <u>table 27</u>, Appendix 3: Tourism product classification.)

Industries producing tourism products

The tourism industry ratio

The tourism industry ratio is the proportion of an industry's output that is consumed by tourists. It provides the means of classifying industries, as outlined below.

Categorising industries producing tourism products

A tourism-characteristic industry is one where either:

- at least 25 percent of the industry's output is purchased by tourists, or
- the industry's output includes a tourism-characteristic product. For example, less than 25 percent of the water transport industry's output is consumed by tourists, but its characteristic outputs are water freight transport and water passenger transport. Water passenger transport is a tourism-characteristic product, so the water transport industry is classified as a tourism-characteristic industry, and a direct physical contact occurs between the industry and the tourist buying its products.

Therefore, manufacturing and wholesaling industries are not tourism-characteristic industries.

A **tourism-related** industry is one where:

- the industry is not a tourism-characteristic industry
- between 5 and 25 percent of the industry's output is purchased by tourists
- a direct physical contact occurs between the industry and the tourist buying its products.

Therefore, manufacturing and wholesaling industries are not tourism-related industries.

A **non-tourism-specific** industry is any industry that is not a tourism-characteristic industry or a tourism-related industry. However, a non-tourism-specific industry may still sell some of its products to tourists.

The following points relate to the TSA industry classification:

- The industries are consistent with the published industries within the NZSNA.
- The classification of industries outlined above has no effect on the value of direct tourism value added. This is because direct tourism value added is determined by the scope of total tourism expenditure regardless of the classification of the industry. We identify the tourismcharacteristic and tourism-related industries for extra emphasis in this TSA because they are involved significantly in tourism.

Note that constraints on the availability of input data for provisional accounts mean that supply by product and value added are shown only for tourism-characteristic industries and for all other industries.

Value added

Value added is the 'value' that a producer adds to the raw material goods and services and/or transformed goods it purchases in the process of production. This can be shown as:

Output (produced goods and services)

less intermediate consumption (purchased goods and services required to

produce outputs)

equals value added.

The value added of a business is less than the value of its output.

Value added has several components:

- compensation of employees the cost of employing labour used to produce output
- gross operating surplus and gross mixed income the surplus or deficit accruing from
 production before taking account of any interest or rent payable on financial or tangible
 non-produced assets borrowed or rented by the enterprise, any interest or rent receivable
 on financial or tangible non-produced assets owned by the enterprise, or the depreciation of
 capital used in production (ie consumption of fixed capital)
- net taxes on production and imports taxes payable (less subsidies receivable) on goods and services (excluding GST) when they are produced, plus taxes and duties on imports that become payable (less subsidies receivable) when goods enter the country.

Direct tourism value added

Direct tourism value added is the value added by producers from the production of goods and services that are sold directly to tourists. This results in a measure of the contribution of tourism to GDP that is consistent with that measured for other industries in the economy.

These goods and services (products) can be produced through the involvement of a manufacturer and a wholesaler before being supplied to retailers to sell to tourists. During this process, a producer can apply both an amount to recover costs associated with providing the goods or services, and a profit component. This amount can take the form of:

- the margin a retailer applies to selling a product to a tourist
- the margin charged by the wholesaler
- the price received by the manufacturer.

The margin represents the mark-up, or the difference between the value at which goods or services are acquired and the value for which they are sold. For the product to be sold directly to a tourist there needs to be a strong economic link between the tourist and the supplier of the goods or services. This is best represented in the form of a direct or physical contact between the parties, for example a tourist purchasing a souvenir from a retail outlet.

Through selling the souvenir to the tourist, the producer (a retail outlet in this case) will have applied their margin (or 'mark-up') over and above the costs associated with selling this souvenir. It is solely this margin that direct tourism value added is then derived from.

Indirect tourism value added

Indirect tourism value added is generated from the purchase of goods that are subsequently resold to tourists, or the purchase of goods and services used in producing products that are sold directly to tourists. Producers of both these products have no direct relationship with the tourist.

Using the example above, the manufacturer's purchase of raw materials and services used in producing the souvenir, and the margin applied by the wholesaler, represent the components from which indirect tourism value added is derived – for industries that have no direct contact with the tourist.

Relating direct tourism value added and tourism expenditure

It is important to distinguish between two related concepts: total tourism expenditure and direct tourism value added. The two differ in both concept and scope.

Total tourism expenditure comprises output sold to tourists, imported goods directly purchased by tourists, and GST on purchases by tourists. Direct tourism value added equals the value of goods and services produced domestically and consumed by tourists, less the value of purchased goods and services required to produce these goods and services (outputs).

The relationship between these concepts is as follows:

Total tourism avnanditura

	l otal tourism expenditure
less	GST
equals	tourism demand
less	imports sold directly to tourists by retailers
equals	tourism output
less	tourism intermediate consumption (including goods for resale)
equals	direct tourism value added
	Tourism intermediate consumption (including goods for resale)
less	imports used in production of goods and services sold to tourists
equals	indirect tourism value added.

Appendix 2: Methodology

Direct tourism value added

Tourism expenditure and direct tourism value added (or tourism's contribution to gross domestic product (GDP)) are the two major economic aggregates derived in a tourism satellite account (TSA).

Tourism expenditure measures the value of products purchased by visitors, whether before, during, or after travel.

Direct tourism value added measures the value of the output of tourism products by industries, less the value of goods and services used in their production (intermediate consumption). When summed across all industries, it shows the direct value added to the economy by tourism.

Tables 11, 12, 13, and 14 detail the process used to measure direct tourism value added. This involves the following steps:

- Begin with tourism expenditure by type of product (presented in <u>table 11</u> and further dissected by type of tourist in <u>table 12</u>).
- Match tourism expenditure by type of product with the total supply of products in the
 annual supply and use tables of the New Zealand economy. Derive the tourism product ratio
 for each product by dividing the value of tourism expenditure by total supply of the product.
- Multiply each industry's supply by product by the tourism product ratio, to calculate tourism supply by industry. <u>Table 13</u> presents tourism supply for tourism-characteristic industries, all other industries, and imports.
- Divide tourism supply by total output by industry, to give tourism industry ratios the proportion of each industry's total output that is purchased by tourists.
- Multiply the tourism industry ratios through each industry's production account. Sum the
 resulting series to obtain total tourism value added. <u>Table 14</u> presents total tourism value
 added resulting from tourism-characteristic industries and all other industries.

The same methodology underlies the calculation of direct tourism value added for final and provisional accounts, and is ordered according to the steps above. However, the derivation of inputs into the calculation process and the level at which calculations are performed differ between final and provisional accounts. The main reasons for this are:

- the lack of balanced supply and use results for the provisional accounts limits the level at which expenditure by product can be calculated for business and government travellers
- the same constraints apply to the supply of tourism products. The absence of balanced supply and use accounts means the supply of each product by industry cannot be derived reliably at the same level of detail as in a final account
- the industry production accounts, and therefore industry value added, are provisional and are yet to be balanced within a supply and use framework to derive a final GDP figure.

Differences in deriving input data for final and provisional accounts are outlined in the following sections.

Calculating tourism expenditure

Table 12 presents tourism expenditure by type of product and by type of tourist: international (international visitors and international students); household; and business and government. We describe below how we calculate expenditure by the three types of tourist.

International tourism expenditure

International tourism expenditure comprises both international visitors' and international students' expenditure.

Final accounts

Expenditure by international tourists in New Zealand is derived from the International Visitor Survey (IVS) published by the Ministry of Business, Innovation and Employment (MBIE).

The IVS is a sample survey of approximately 8,900 international visitors to New Zealand aged 15 years or older per year, excluding individuals whose purpose of visiting New Zealand was to attend a recognised educational institute, and are foreign-fee paying students.

The IVS draws its visitor sample based on measures of the actual number of target population visitors who departed New Zealand from our international airports over the survey time period in the previous year. Using actual historical visitor departure information, time periods are randomly selected with the probability of being selected based on the number of flights during that period – periods with no flights will have no probability of being selected, while those with a high number of flights have a high probability. For Auckland, Wellington, and Queenstown airports, two-hour time periods are used, while for Christchurch airport it is a four-hour time period.

The IVS uses a two-part collection process. The first part involves screening departing visitors during the selected time periods for eligibility and collecting email addresses. The second part, where the bulk of the information is captured, is via an online survey, a link to which is sent to those eligible and agreeing to participate.

Each respondent within the sample is weighted to represent their fraction of the total number of all international visitors departing New Zealand using migration data within the survey's target population. Survey response weights are adjusted to reflect the unequal probabilities of respondent selection from the composition of the target population, and known discrepancies between the sample and the population definitions.

The IVS data is supplemented with breakdowns from balanced supply and use accounts, consumers price index (CPI) weightings, and tourism producers' own data. In some instances, tourism producers can provide estimates of the proportions of their output consumed by international visitors.

Broad-level valuations of international visitors' expenditure in New Zealand are derived from transportation and travel services items in the balance of payments (BoP). IVS data is a major source for BoP statistics, but several supplementary sources are also used. TSA totals exclude people who are visiting New Zealand specifically to obtain medical treatment (an adjustment needed because of a conceptual difference between TSA and BoP statistics). Small revisions have been made to the source data in some years. We break down these totals into tourism products, using proportions from balanced supply and use accounts. We compare these splits with other data sources, and refine the totals where additional information is available.

Provisional accounts

The same basic data source, the IVS, is also used in the provisional accounts. However, in the absence of supply and use tables, the IVS is not broken down to the same level of product detail found in final accounts. We use the breakdown for the latest final account to derive the initial product breakdown for the provisional years. This initial product breakdown is subsequently refined during the balancing process (covered in more detail later in this appendix – see <u>Balancing tourism</u> expenditure and tourism production).

International Visitor Survey review 2018

Following the Stats NZ review of MBIE's IVS in July 2018 (<u>International Visitor Survey review 2018</u>), changes were recommended for the IVS methodology. Two recommendations were introduced from the March 2018 quarter: to improve the sample allocation, and to reset the outlier detection level.

We will assess the need for revisions to the IVS after these and other recommended improvements have been made when their combined effect is evident. Revisions would be incorporated into *Tourism satellite account: 2019*.

Cruise ship expenditure by international visitors

We have revised cruise expenditure estimates in *Tourism satellite account: 2018* reflecting the combined impact of revised traveller by port statistics, changes to existing expenditure sources, and the incorporation of additional data providers. Further refinements to the compilation of cruise ship expenditure estimates are expected in *Tourism satellite account: 2019*.

Background

Historically, New Zealand's international visitor expenditure measurement and macro-economic outputs, including the TSA, have not captured the full value of expenditure undertaken by cruise travellers.

This was due to the IVS being limited to airport departures therefore only those cruise travellers who completed their cruise in New Zealand before flying out were within scope. Consequently, this did not account for the significant and growing number of cruise travellers who fly in and cruise out, and cruise in and cruise out of New Zealand.

Stats NZ and MBIE enhanced the New Zealand Cruise Association's (NZCA) method for calculating expenditure undertaken by cruise travellers and sourced additional administrative data.

The key data sources that enabled this development are:

- cruise ship schedules
- cruise ship manifests of passenger and crew
- key firms involved in the provision of goods and services to ships
- key firms involved in the provision of shore excursions
- international card transaction data.

How we calculate cruise ship expenditure by international visitors

Data sources

For each cruise season, NZCA provides us with a ship schedule outlining the dates and port locations together with arrival and departure timings relating to each specific cruise ship visit. We source cruise ship manifests containing the count and details of passengers and crew from the New Zealand Customs Service. We receive international card transaction data with Paymark merchants (subsequently scaled to the full population of merchants) from Marketview Ltd, with date, time, country of card issue, location (territorial authority), transaction value, and industry identifiers. We source cash factors from the IVS to provide a comprehensive estimate of expenditure across key payment mediums.

Linking data

Using card transaction data, we link international-cardholding cruise travellers who make a transaction on two dates and at two territorial authorities with a particular cruise ship voyage. We

take into account timing parameters to ensure transactions occur within the timing the ship is in port, as well as factoring in allowances for disembarking and embarking.

Using information from shore excursion operators and regional tourism organisations about available tourism activities, we establish a geographic location around each port that a cruise visitor could be expected to travel and spend. We get additional information from shore excursion operators regarding overland tours (disembarking at one port before re-joining at another) to ensure dates, timings, and geographic locations for capturing associated shore-based card expenditure.

Exclusions and scaling

We then apply exclusions to matches based on the particular industry spent in and the use of the card outside of the geographic locations aligned with the ship schedule. The resultant dataset is scaled up by Marketview Ltd to represent the full population of merchants in New Zealand and provided to Stats NZ.

Unique international passenger (excluding New Zealand passport holders) and actual crew counts by nationality (passport) as determined by Stats NZ are used to scale the determined card spend. Cash factors are applied reflecting the propensity and breakdown of key nationalities card to cash use.

Output

The resultant output is produced by quarter, by country of origin and by port. It is subsequently added to the following data sources:

- shipping agents expenditure related to ship visits logistics, including port fees, customs security, and minor repairs and utilities
- bunkering the provision of marine fuels
- providoring the provision of produce and other supplies
- shore excursions a range of tours or activities organised for passengers on behalf of the cruise line and the destination.

These data sources are provided directly from a number of firms involved on an annual basis.

Note: airfares for international passengers and crew are excluded as is cruise ship expenditure by domestic travellers. The domestic cruise expenditure is recorded within existing domestic tourism estimates but is not currently separately identifiable.

The combination of these data sources enables comprehensive cruise ship expenditure estimates to be derived for the years ended June 2015–18 only. Data prior to 2015 is not available due to the limitations of some key data inputs. No modelling is undertaken to determine estimates prior to 2015.

Tourism expenditure by international students

International students are defined as those studying in New Zealand for less than 12 months. *Tourism satellite account: 2018* incorporates updated living costs ratios (from 2013) and changes to export education levy data used to derive international student expenditure. This includes changes to student numbers across the time series used to derive tourism expenditure by international students.

Tourism expenditure by international students is calculated using the following steps:

Obtain total international student numbers from the Ministry of Education.

- Derive the number of international students studying in New Zealand for less than 12 months as a proportion of total student numbers, by using the number of short-term passenger arrivals visiting New Zealand for education purposes.
- Calculate expenditure on tuition fees using the Ministry of Education's Export Education Levy data (inclusive of GST), a census of international students studying in New Zealand. It includes average tuition fees for students studying at schools, tertiary education institutes, and private tertiary establishments (such as English language schools).
- Calculate expenditure on living costs (including accommodation costs) consistent with how it
 is calculated by BoP. This involves taking average tuition fee data and applying
 predetermined living cost multipliers for each type of student.
- Calculate expenditure on airfares by short-term students by multiplying the number of students in New Zealand for less than 12 months as a proportion of total international arrivals, by the total airfare income of resident airlines (from BoP).
- Sum expenditure on tuition fees, living costs, and airfares, to obtain the total tourism expenditure by international students in New Zealand for less than 12 months.

Household tourism expenditure

Household tourism expenditure, shown as household demand in table 12, consists of four components:

- 1. Household domestic travel expenditure
- 2. Outbound travel purchased from New Zealand-resident firms
- 3. Off-trip purchases of tourism-specific consumer durable goods
- 4. Imputed rental on holiday homes.

1. Household domestic travel expenditure

Tourism satellite account: 2018 uses an administrative data source based on electronic card transaction data to collect and determine household domestic travel expenditure. The Household Tourism Expenditure Estimates (HTEE), developed by Stats NZ and funded by MBIE, cover the years ended March 2009–18. Prior to the year ended March 2009, we used data from the Domestic Travel Survey (DTS) undertaken by MBIE. The DTS collected the expenditure and behaviours of domestic travellers within New Zealand.

The DTS data collection began in 1999, with data available as both quarterly and annual series through to its cessation in 2013. The DTS data provided information on the nature of domestic travel activity, including the origin and destination of domestic travellers. MBIE categorised the data by purpose of travel, expenditure type, and length of trip (either day trip or overnight trip). The four travel purposes were: holiday, visiting friends and relatives, business, and other. The eight expenditure categories were: transport, accommodation, food, alcohol, gifts and souvenirs, recreation, other shopping, and gambling. DTS expenditure was available by purpose of travel, expenditure category, and length of trip.

We then supplemented the DTS with additional household tourism expenditure for outbound travel, off-trip purchases, and imputed rental on holiday homes – using a mix of sources and methods, as outlined in the following sections.

In the year ended March 2014, the DTS was replaced by a developmental version of the HTEE, which was further developed and fully integrated into *Tourism satellite account: 2015*. We have made additional refinements to these estimates for *Tourism satellite account: 2018*. The HTEE use

geographic information to determine tourism spending in New Zealand by New Zealanders and is available from the year ending March 2009. The DTS is used in determining prior year estimates.

HTEE source data

Electronic card transaction data is provided to us by Marketview Ltd, who acquires this from two main sources:

- Paymark the largest electronic card payment network in New Zealand
- Bank of New Zealand (BNZ) spending by BNZ cardholders, which excludes any personal identifiers. We call this depersonalised spending.

Paymark data

Data is derived from all transactions made at merchants on the Paymark network. Approximately 70 percent of New Zealand retailers use the Paymark network. The dataset includes all eftpos and credit card transactions made at these retailers. There is no link to the person making the transaction, but transactions are linked to merchants. The Paymark dataset excludes 'cash-out' transactions.

From this data a complete valuation of New Zealanders' spending can be generated, comprising:

- day of the week and time of the day
- where in New Zealand the transaction occurred
- ANZSIC06 (2006 Australian and New Zealand Standard Industry Classification) storetype
- domestic or internationally issued card.

BNZ data

The BNZ dataset is based on the depersonalised eftpos (debit card) and credit card spending of approximately 600,000 BNZ cardholders (15 years +) in the New Zealand retail market. BNZ has approximately a 20 percent share of the cards market, meaning BNZ cardholders account for approximately 1 in 5 retail transactions. These cardholders are representative of the national population. The dataset includes spending at Paymark and non-Paymark retailers. It excludes 'cash out' transactions and bank transfers.

Through the BNZ dataset, Marketview receives a view of spending at virtually all merchants in New Zealand that receive electronic card spending, regardless of whether the merchant uses the Paymark network or not. They can identify where in New Zealand the transaction occurred and whether the transaction was conducted at a physical store or online.

Sample management

To ensure the BNZ cardholder base is both geographically and demographically distributed in line with the New Zealand population, a weighting is applied by Marketview.

While BNZ cardholders are distributed throughout New Zealand, small variations exist down to an area unit/customer age level. This weighting was calculated by determining the distribution of cardholders and comparing this to the distribution of the overall population.

Marketview uses Stats NZ's area unit population estimates as the basis for the national population. This enables the distribution to change over time, as each year of the data was compared with a different population estimate. For example, Marketview data from 2018 is weighted according to the 2017 population estimates. This ensures significant population changes – such as after the Canterbury earthquakes, or new subdivisions opening – are accounted for in the dataset.

The weighting factor is applied to the dataset by age (in five-year bands starting at 15–19), by census area unit, and by month. This weighting ensures the distribution of BNZ cardholders matches the distribution of the national population, by age, location, and over time. Weighting by age and location ensures management of any bias in the sample, as income and wealth typically increase with age, and wealth can correlate with where a person lives.

Combining data sources

By combining Paymark and BNZ data, Marketview produces a dataset that accurately quantifies:

- the value of spending of each transaction
- the source and origin of those payments, eg business vs personal, domestic vs international tourist
- where in New Zealand the cardholder lives (the area unit the card resides in)
- where each transaction took place, eg physical store vs online, Auckland vs Invercargill
- the industry category of the merchants, as defined by ANZSIC06 codes
- the time and day of the purchase.

Defining household tourism expenditure

Household tourism expenditure is defined as expenditure that occurs outside a 40km radius of the meshblock in which the cardholder's address is located, and aligns with industries defined as tourism industries. The 40km reflects the New Zealand definition of travel outside one's usual environment. Tourism industries encompass both characteristic and related industry data along with selected non-tourism industries.

Marketview applies this 40km radius to the combined Paymark and BNZ dataset to determine the HTEE. Exceptions are made where regular behavioural spending patterns show a person's usual environment extends to an area outside the 40km radius, such as commuters. This is removed from the HTEE.

Additional data on internet transactions is collected specifically for selected tourism industries that require travel to consume a purchased good. For example, internet expenditure on accommodation and air passenger transport is collected.

Scaling household tourism expenditure data to total economy

As electronic card data reflects only one aspect of household tourism expenditure across the New Zealand economy, Marketview upscales their dataset by adding in a factor for cash and other payment methods. This is calculated as the difference between electronic card spending and total economy spending based on ANZSICO6 industry information supplied from our Annual Enterprise Survey (AES).

For example, Marketview may record the total value of electronic card spending in ANZSIC06 industry G4110 at \$100 for the year, with 10 percent being tourism (\$10). The total industry value of G4110 as calculated from the AES was \$120. The Marketview card value is thus upscaled by a multiple of 1.2, yielding a total market value of \$120, consistent with the AES. The tourism component is still 10 percent, hence tourism spending for that year is calculated at \$12.

The assumption used is that consumer and business spending on cash versus card on tourism and non-tourism related trips are equal.

The HTEE dataset

The HTEE dataset provided by Marketview covers the years 2009–18. At the time of compilation, AES data was available to the 2017 financial year. To produce the HTEE through to 2018, Marketview estimated the value of each industry in the 2018 provisional year by applying movements for each industry from additional Stats NZ data sources, including GST data, to the 2017 AES data.

For example, Marketview took annual movements in spending for ANZSICO6 industry G4110 from the Retail Trade Survey. They applied this to the 2017 AES data to determine a 2018 provisional estimate. They estimated other industries from data indicators sourced from Stats NZ.

Marketview will update the provisional year estimate as AES data becomes available and indicator data is revised as part of the annual publication cycle of the TSA.

Turning industry-based HTEE into tourism products

The HTEE industry dataset is then broken down into tourism-defined products using annual supplyuse commodity proportions and retail industries sales data. For validation purposes it is then confronted against household consumption expenditure commodity data net of overseas visitor expenditure and New Zealanders' travel expenditure abroad. This isolates New Zealanders' spending within New Zealand, allowing for a comparison on an equivalent expenditure basis with the HTEE.

Additional household tourism expenditure

While the HTEE dataset provided by Marketview captures most household tourism expenditure, the TSA supplements the HTEE product breakdowns with its own product expenditure estimates. These include some off-trip purchases of tourism-specific consumer durable goods and imputed rental on holiday homes.

Both the HTEE and additional Stats NZ tourism product data then provide the initial expenditure levels to feed into the balancing process. These levels can be subsequently modified where necessary (the balancing process is covered in more detail later in this appendix – see <u>Balancing tourism expenditure and tourism production</u>).

2. Outbound travel purchased from New Zealand-resident firms

All years

Household tourism expenditure in the TSA includes expenditure on overseas travel, where New Zealanders purchase New Zealand-produced goods and services. This expenditure includes fares paid to resident air carriers for flying a household tourist overseas, commissions paid to resident travel agents for booking household outbound travel, pre-paid travel insurance, and vaccinations needed by household outbound tourists. We estimate this expenditure from sources including the HTEE and company data.

3. Off-trip purchases of tourism-specific consumer durable goods

All years

Off-trip expenditure by households on tourism-specific consumer durables (such as tents and sleeping bags) is included in household tourism expenditure. These off-trip purchases are based on data sourced from the HES together with supply-side product data and are added to the on-trip purchases of these goods. Off-trip tourism expenditure is defined in Tourism expenditure in Appendix 1: Conceptual framework. Read more about consumer durables in the TSA in the Special treatments section later in this appendix.

4. Imputed rental on holiday homes

All years

The TSA includes an imputed rental on dwellings owned by households that are used as holiday homes. We calculate the total number of holiday homes using data from the Census of Population and Dwellings and an annual volume change indicator. We calculate annually an average weekly imputed rental price derived from national accounts imputed rental data. We multiply this price by the number of weeks in the year to give an annual imputed rental price. We then multiply the number of holiday homes by the annual imputed rental price to give the total imputed rental value.

Business and government travel expenditure

Final accounts

Business and government travel expenditure is drawn from intermediate consumption of industry data in the balanced supply and use accounts. We calculate it by applying product ratios reflecting travel expenses to total intermediate consumption for each of business and government from the latest final account. This provides the initial product breakdown, which we subsequently modify during the balancing process (covered in more detail later in this appendix – see <u>Balancing tourism expenditure and tourism production</u>).

Provisional accounts

In the absence of balanced supply and use accounts, we first derive intermediate consumption by applying a variety of data sources, including the Annual Enterprise Survey, GST purchases, and annual report data to the latest final account year. Each year is then subsequently derived from the previous year's totals by applying key data source movements. We then apply the product ratio reflecting travel expenses to the derived total intermediate consumption for each of business and government. This provides the initial product breakdown, which we subsequently modify during the balancing process.

Production of tourism goods and services

Final accounts

Analysing the production of tourism-characteristic and tourism-related products starts with the production accounts by industry that underlie the supply and use table. Within the balanced supply and use accounts, we break down each industry's output and intermediate consumption into products. Final demand categories such as household consumption expenditure and exports are also broken down by product. For the TSA, we rearrange output product data from balanced supply and use tables to focus on tourism-characteristic and tourism-related products. We arrange total sales by each industry into tourism-characteristic, tourism-related, and non-tourism-related products.

Provisional accounts

Constraints on the availability of data for provisional accounts (no balanced supply and use results available) mean that supply by product is shown only for tourism-characteristic industries and for all other industries. Without balanced supply and use accounts, we derive total output by industry using a variety of indicators, including GST sales, the Retail Trade Survey, the Annual Enterprise Survey, the Accommodation Survey, and annual reports. We break down this output into the supply of tourism products by using the latest final account breakdown of output by product and industry. This provides the initial product breakdown, which we subsequently modify during the balancing process (covered in more detail in <u>Balancing tourism expenditure and tourism production</u>).

Balancing tourism expenditure and tourism production

Final accounts

Supply and use balancing is an established and integral process when compiling the national accounts. It is used "for checking the consistency of statistics on flows of goods and services obtained from quite different kinds of statistical sources" (Inter-Secretariat Working Group on National Accounts, 2008). The supply and use balancing process rigorously examines diverse data sources, reconciling them in a framework that reduces the error margins implicit in the individual data sources.

The supply and use approach provides the best framework to bring the demand and supply sides of the economy into balance. The usual process is to confront supply and demand by product, and perform adjustments so that the value of the supply of each product is equal to the value used. We make adjustments to either supply or demand, depending on the relative strength of each data source. In doing so, the potential for errors that may result from using a single data source, either supply- or demand-based, is reduced. We also performed similar checking of supply and use by product, which underlies Stats NZ's annual supply and use models.

The TSA begins with the balanced supply and use tables, so we balance all products in terms of their total supply and total use. We break down these 'product accounts' further into their tourism and non-tourism components. The resulting tourism supply and tourism use may no longer be balanced because of the methodology used to make this split. We then use the same type of data confrontation as used in supply and use balancing to ensure that tourism supply is equal to tourism use.

A typical example of how this process is undertaken follows:

- Compare the total supply of tourism-characteristic and tourism-related products with the total
 direct tourism demand and non-tourism demand for these products. This comparison
 identifies areas where the tourism product ratio is unexpected or obviously incorrect. Note
 that GST is deducted from tourism expenditure for this comparison so production for and
 expenditure on tourism products are both valued in producers' prices.
- 2. Re-examine the methodology used, checking for errors, conceptual inconsistencies, and methodological problems.
- 3. Compare the strength of the respective supply- and demand-side data sources, identifying areas where particular strengths and weaknesses lie. Typically, the strengths are in the supply-side industry and product data, and the total demand by type of tourist data. Demand for individual products is often considered to be of weaker quality.

The focus is to strengthen the breakdown of total tourism expenditure types into products. The first step is to look for any extra data sources to provide indications of what these should be. Where possible, we incorporate changes. In areas where no data is available, we make iterative changes to these products, keeping particular areas of confidence 'locked'. We continue this process until the ratios for each product come into line with expectations. The outcome of the balancing process is a strengthened analysis and a complete set of tourism product ratios – that is, the proportion of the supply of products that make up tourism demand. The tourism industry ratios, and thus tourism value added, are derived from these.

Provisional accounts

The same checking of supply and use by product that underlies the annual supply and use analysis is performed in the provisional accounts. However, due to data constraints, the process is at a more aggregated product level. Furthermore, the relative strengths of supply and use data sources are quite different between provisional and final accounts.

Calculating direct tourism value added

Derivation of the tourism product ratio

Tourism consumption for each product is divided by total supply to give the tourism product ratio. This ratio measures the proportion of a product's output that is used by tourists.

Derivation of tourism supply and the tourism industry ratio

Calculation of tourism supply and the tourism industry ratio for each industry is an important intermediate step in deriving direct tourism value added and employment.

To derive tourism supply by product by industry, we apply the tourism product ratio (from <u>table 12</u>) to the supply of that product by each industry. We then calculate total tourism supply by each industry by summing tourism supply for all products.

For example, we applied the tourism product ratio for accommodation services to the output of all industries supplying this product. This gave tourism supply of accommodation services by each industry. We then divided tourism supply by each industry by total industry output, to give the tourism industry ratio. It is worth noting that although the accommodation industry is the dominant supplier of accommodation services it is not the sole supplier, as other industries can also supply this product.

While calculating the tourism industry ratio and tourism supply by industry is an important step in deriving direct tourism value added, neither is shown in provisional years as these values are themselves derived from the gross output of each industry. <u>Table 13</u> shows total supply and tourism supply by product for tourism-characteristic and all other industries.

Derivation of direct tourism value added

The tourism industry ratio is applied to the production account for each industry to obtain direct tourism value added.

Production accounts by industry are not available for provisional years. Therefore, before we can calculate tourism value added, we derive provisional production accounts for each industry. We use data from a variety of sources, including GST sales and purchases, annual reports, and the Annual Enterprise Survey, to break down the latest published total value added to give value added by industry.

Final TSA account tables present full production accounts, as well as tourism production accounts by industry. Direct tourism value added in provisional TSA accounts is split by tourism-characteristic and all other industries. This reflects the less detailed nature of total value added by industry in years in which tourism value added is derived as a subset.

We make a major assumption relating to the use of the tourism product ratio and the tourism industry ratios in compiling the TSA. The industry technology assumption is that the input requirements of tourism and non-tourism products are identical for an industry. That is, if 50 percent of the output of an industry is goods and services sold to tourists, then 50 percent of its inputs are used to produce those goods and services. This is likely to be a more valid assumption for an industry that makes a range of products that are very similar, requiring similar inputs. However, in some instances the assumption is likely to be less valid; for example where an industry has a low degree of tourism specialisation, and a diverse range of products are produced.

An alternate assumption is to relate specific inputs to outputs – that is, a product technology assumption. However, this approach is not easily implemented due to the lack of sufficiently detailed product data. Industry data, on the other hand, is far more readily available. Both the industry and product technology assumptions are sanctioned by the UNWTO.

Direct tourism employment

Direct tourism employment (see $\underline{\text{table 17}}$) is derived by applying tourism industry ratios to the number of people employed in each industry. This approach produces a value for the number of people in each industry as a result of tourism.

In *Tourism satellite account: 2018*, employment numbers come from Linked Employer-Employee Data (LEED) annual statistics by each industry. Employment and tourism employment are presented by the number of people employed, for both employees and working proprietors, with a series available from 2000.

LEED data is based on administrative tax data, where the number of hours worked is not available, so we cannot provide a full-time and part-time split. Further discussion about LEED is covered in the tourism employment source data section later in this appendix.

Tourism industry profitability

Tourism gross operating surplus and gross mixed income as a percentage of total tourism output is one measure of tourism profitability. It reflects national accounting rather than commercial concepts. Gross operating surplus and gross mixed income is before interest and depreciation.

Indirect effects of tourism

Indirect imports and tourism value added

As described in appendix 1 (see <u>Relating direct tourism value added and tourism expenditure</u>), the basis of a TSA's measure of indirect tourism value added (or tourism's indirect contribution to GDP) is:

Total tourism expenditure

less GST

equals tourism demand

less imports sold directly to tourists by retailers

equals tourism output

less tourism intermediate consumption (inclusive of goods for resale)

equals direct tourism value added

Tourism intermediate consumption (inclusive of goods for resale)

less imports used in production of goods and services sold to tourists

equals indirect tourism value added.

We discuss below the derivation of imports used in producing goods and services sold to tourists and indirect tourism value added.

Imports used in production of goods and services sold to tourists

Indirect tourism imports represent imported products not sold directly to tourists, but used in producing tourism supply.

We calculate the value of imports used in producing products sold to tourists using the table of cumulated import coefficients of industries, and categories of final demand, from 2013 input-output tables. This is the most recent cumulated import coefficients table available and the application of these latest tables has been incorporated in *Tourism satellite account: 2018*. It may be updated when the relevant tables from more recent years become available. The cumulated imports coefficients table shows how many units of imports are required for an industry to produce a unit of output.

Tourism supply by industry is derived as part of the direct tourism value added calculation. Multiplying this supply by the relevant import coefficients by industry produces the value of imports used in producing goods and services sold to tourists.

Indirect tourism value added

Indirect tourism value added may be calculated directly by using the supply and use framework, or derived indirectly as a residual item. The indirect method calculates total tourism expenditure (excluding GST), then subtracts direct tourism value added, imports sold directly to tourists by retailers, and imports used in the production of goods and services that are sold to tourists.

Final accounts

Indirect tourism value added is calculated directly using the table of industry-by-industry total requirements of 2013 input-output tables – the most recent total requirements table available. The application of these latest tables has been incorporated in *Tourism satellite account: 2018*.

Provisional accounts

Indirect tourism value added is derived using the subtraction method, after first deriving imports used in production of goods and services sold to tourists. The advantage of this method is that it is simpler, does not require multiple iterations, and industry total value added is a less critical input.

Indirect tourism employment

The number of people employed indirectly in tourism is presented in table 7.

Final accounts

Indirect tourism employment takes, as its starting point, indirect tourism value added by industry. We calculate the ratio of indirect tourism value added to value added, and multiply it by employment by industry, to give indirect tourism employment. We sum these industry estimates to calculate the number of people employed indirectly in tourism.

Provisional accounts

For provisional years, neither direct tourism value added nor indirect tourism value added is available by industry in the New Zealand System of National Accounts (NZSNA). Therefore, we calculate the ratio of indirect tourism value added to value added, by industry, from the latest final year. We multiply this by employment by industry, to give the number of people employed indirectly in tourism.

Supply and use framework

Final accounts

The TSA is a rearrangement of the NZSNA. More specifically, we derive the tables for final accounts from the annual supply and use analyses of the New Zealand economy. Supply and use analyses are both a statistical and economic representation of the economy, broken down by industry, product, primary input category (for example, compensation of employees, consumption of fixed capital), and final demand category (such as household consumption expenditure and exports). By adopting the supply and use framework, a tourism industry can be presented in the same way as those for the agriculture and manufacturing industries are presented. It is then possible for tourism to be compared with other industries and with total national accounts aggregates, such as GDP.

Additionally, by compiling the TSA within a supply and use framework, we can produce derived tables that allow further analyses. For example, an impact analysis can be completed, which allows the user to trace the direct and indirect impact of tourism expenditure on the economy. This shows the flow-on effects of tourism, as expenditure on tourism products first affects industries that directly supply tourists, and then industries that provide indirect inputs to the industries supplying tourists.

The supply and use structure also allows economic data on tourism to be easily linked to non-financial data such as employment. Balanced supply and use accounts provide detail, at the product level, of both the structure of industry output (supply), and the demand for these products by business and final demand categories (eg household spending). They are the starting point from which a TSA is derived.

Provisional accounts

Balanced supply and use accounts are not yet available for provisional years. Only total economywide value added has been published for these years. Therefore, we calculate aggregated supply of products sold to tourists by industry. This involves:

- deriving the output of each industry (as outlined earlier in this appendix)
- breaking down total output into supply of each tourism product, using the industry output breakdown from the latest available supply and use analysis. This provides the initial product breakdown, which we subsequently modify during the balancing process
- calculating value added by industry within the constraint of published total value added.

The absence of balanced supply and use accounts results in less robust estimates of tourism value added for these later years.

Employment source data

Linked Employer-Employee Data (LEED)

LEED uses existing administrative data from the Inland Revenue taxation system and business data from Stats NZ's Business Register (BR). LEED provides statistics on a variety of job measurements including the number of people employed, number of filled jobs, job flows, worker flows, mean and median earnings for continuing jobs and new hires, and total earnings. This information gives an insight into the operation of New Zealand's labour market on both a quarterly and annual basis from national, regional, and territorial authority perspectives.

The LEED annual statistics cover all individuals ('employees') who either receive income from which tax is deducted at source, or from self-employment. In LEED, the employer is the geographical unit or physical location of the business rather than the administrative reporting unit. For example, a nationwide retail chain may have one Inland Revenue reporting unit covering all of its retail branches. In LEED, each branch is considered to be a distinct employer.

For inclusion in LEED annual statistics, a person must:

- be aged 15 years and over at the start of the tax year
- have received non-zero income with tax deducted at source through the Employer Monthly Schedule (EMS) system, or self-employment income in the reference period.

All income measures are before tax.

The tourism satellite account uses the LEED annual Table 1.5: Main earnings source, by industry (ANZSICO6) measure, which allocates a person to the industry where they have generated the most earnings from in the tax year.

For more information about LEED employment, refer to Linked Employer-Employee Data (LEED).

Employment and tourism employment estimates for 2018

Employment and tourism employment are presented by the number of people employed, for both employees and working proprietors, with a series available from 2000. As LEED annual statistics are only available up until 2017 at the time of publication, *Tourism satellite account: 2018* provides aggregated total estimates for the year 2018. We will update these estimates as LEED becomes available as part of the annual publication cycle of the tourism satellite account.

These are derived for both employees and working proprietors using differing employment data sources.

- Employee estimates for 2018 are derived using a more timely, summary source of EMS data.
 This data is currently used as an experimental series and business size indicator for the BR.
 For the purposes of the TSA, the annual March month movements are then applied to 2017 employee industry data.
- Working proprietor estimates for 2018 are derived by applying the year ended March (quarterly mean) annual Household Labour Force Survey (HLFS) industry movements to 2017 LEED working proprietor industry data.

Tourism employment LEED examples

The following tourism industry examples illustrate how to use the LEED-based 'number of people employed in tourism' measure. Examples of how employment would be measured from a LEED filled-jobs measure perspective are provided for comparison.

- 1. Chloe holds three part-time jobs in Queenstown at a tourist attraction, in a restaurant, and at an accommodation provider. During the year Chloe's highest earnings were generated from the restaurant, therefore she would be assigned to the food and beverage services industry.
 - Under the LEED-based measures this equates to:
 - number of people employed = 1
 - o number of filled jobs = 3.
- 2. Malcolm holds a full-time job in summer in Ohakune working at an outdoor equipment retail store. In winter, he works full time at the cafés on the ski field. Over the year Malcolm generated more earnings from the retail store than his café work, therefore he would be assigned to the retail trade industry. Under the LEED-based measures this equates to:
 - o number of people employed = 1
 - o number of filled jobs = 2.
- 3. Michael is an owner-operator running two seasonal businesses in Nelson one sightseeing, and the other fishing tours. As a working proprietor, Michael has a unique ID number and the businesses he runs will also have their own separate ID number. The same rule for jobs data can be applied to working proprietors, where the link between the person and geographic business location is the key relationship.

For Michael's two seasonal businesses, the data is recorded as:

Name of business	Owner ID number	Business ID number
Michael's first seasonal business	12345	98765
Michael's second seasonal business	12345	87654

Most of Michael's self-employed income was generated from his first seasonal business, therefore he would be allocated to that business's industry. Under the LEED-based measures this equates to:

- o number of people employed = 1
- o number of filled jobs = 2.

- 4. Gemma and Richie live together in Christchurch on the understanding that Gemma is the breadwinner and Richie is the homemaker. Gemma operates her own small business selling tourist souvenirs during the week, while on the weekends she works for the local holiday park. Richie helps at the holiday park in the month of February his only employment for the year. Gemma's highest earnings were generated from her retail business, therefore she would be allocated to the retail trade industry. Richie's employment would be allocated to the accommodation industry. Under the LEED-based measures this equates to:
 - o number of people employed = 2 (1 Gemma and 1 Richie)
 - o number of filled jobs = 3 (2 Gemma and 1 Richie).

Special treatments

This section details areas in TSA methodology that receive special treatment.

Treatment of the margin

In the national accounts, purchases of retail goods can effectively be split into three components:

- the margin (or 'mark-up') of the retailer selling the product
- the margin charged by the wholesaler
- the price received by the manufacturer.

The treatment adopted in the TSA is illustrated in the following example.

A tourist purchases a jersey for \$100, comprising a \$10 mark-up from the retailer (who has direct contact with the tourist), a \$15 margin from the wholesaler, and \$75 charged by the manufacturer. The breakdown is as follows:

- The full purchase price of the jersey (\$100) is recorded as total tourism expenditure.
- The margin (or mark-up) by the retailer selling the jersey to the tourist is the retail output (\$10) from which direct tourism value added is then derived.
- The remaining \$90 is the price received by the manufacturer (\$75) and the margin charged by the wholesaler (\$15). Neither of these has direct contact with the tourist and is the output from which indirect value added is derived.

Consumer durables

Two types of expenditure on consumer durables are included in tourism expenditure in a TSA, consistent with UNWTO recommendations:

- Conceptually, all consumer durables acquired on a trip are included in tourism demand. This includes the purchase of high-value consumer durables during a trip, such as motor vehicles, even though the primary purpose may not be for tourism use. The estimate of purchases of motor vehicles by households while on trips is related to the proportion of New Zealanders living in rural areas. This is based on the assumption that rural residents will travel outside their <u>usual environment</u> (defined in Appendix 1) to purchase a motor vehicle. It is recognised that the usual environment for a rural New Zealander may well include urban areas that fall outside the strict TSA definition of 'usual environment'. While the measurement attempts to take this into consideration, there is little hard data with which to refine it. As a result, these estimates may be revisited in the future.
- Off-trip purchases of a specific range of consumer durables with very high tourism use are included. For example, luggage and tents are acquired primarily for tourism purposes, so are

always considered tourism expenditure. TSAs have a defined set of consumer durables with very high tourism use, based on a list developed by the OECD that is supplemented with consumer durables having high tourism use in New Zealand. (See Appendix 3: Tourism product classification for items included as tourism consumer durables.)

Holiday homes

An imputed rental on owner-occupied dwellings is calculated in the national accounts. This is to avoid distortions over time resulting from changes in the number of people renting rather than owning homes (otherwise, an increase in the number of people renting homes would increase GDP). This imputed rental is applied to both first and second homes (which includes holiday homes).

Although a holiday home may not be in full-time use, we assume it is available to be used all year, and therefore allocate the rental from owning the holiday home to tourism expenditure.

For a TSA, we assume demand for holiday homes to come solely from domestic recreational tourists, due to a lack of data on the origin of holiday homes. We set total supply of holiday homes equal to the total imputed holiday home rental (and therefore total demand) of domestic household tourists, as holiday home supply is provided solely for the purposes of tourism.

Package tours

TSAs apply the net approach to recording package tour expenditure, where the organiser's margin for arranging the tour is recorded as the sole output, while the components of the tour are treated as being purchased directly by the tourist.

For example, a travel agent sells a package tour to a tourist. The travel agent (organiser) records a margin from the sale of the package tour. The expenditure on each of the components of the tour is captured under the respective industry's output.

Travel agency services

Travel agents obtain their income in two major ways. Firstly, they earn income by buying travel products (generally at a bulk discount) and selling them to travellers, thereby earning a margin. Secondly, an agent may book a traveller's fare or accommodation with the service provider, and receive commission from the service provider (on behalf of the traveller). TSAs use special treatments for each of these means of generating income:

- Where travel agents have sold travel to travellers, we record travellers as having bought travel (from the travel provider) and travel agency services (the travel agent's margin).
- Where travel agents have received commissions, we assume providers to have purchased travel agency services on behalf of the tourist. This means that these travel agency services are included in direct tourism demand and therefore contribute to direct tourism value added. Consequently, business travel expenditure includes a high level of demand for travel agency services.

Non-market output services consumed by tourists

The New Zealand TSA does not include an imputation for providing individual non-market tourism services in total tourism consumption. These services include information centres, museums, and libraries, and any other services that tourists use without having to pay for them, such as national parks. This is a recommended inclusion in UNWTO TSA methodology.

To implement the UNWTO recommendation requires:

- a very detailed functional breakdown of the expenditure of government and non-profit institutions, that is, separately identifying those entities which provide 'individualised' services
- splitting this expenditure between tourist and non-tourist consumption.

Identifying individualised and collective non-market consumption is a recommendation from *System of national accounts 2008* (Inter-Secretariat Working Group on National Accounts, 2008). However, we have only partly implemented this (local government has not been fully split). In areas that have been split, the breakdowns are not sufficiently detailed for TSA purposes.

Appendix 3: Tourism product classification

Tourism product information is less detailed in a provisional tourism satellite account than it is for a final tourism satellite account. Table 27 shows these distinctions. The inclusions and exclusions are not exhaustive, but are intended to clarify coverage from a tourism perspective.

Table 27

Tourism product classification				
Tourism product for provisional tourism satellite accounts	Tourism product for tourism satellite accounts	Includes	Excludes	
Accommodation services	Accommodation services	commodation services Hotel and other lodging services		
Food and beverage serving services	Food and beverage serving services	Meal serving services (including takeaways), event catering, and other food serving services, beverage serving services for consumption on the premises		
Air passenger transport	Air passenger transport	Scheduled and unscheduled air passenger transport, rental services of passenger aircraft with operator	Air freight transport	
Other passenger transport	Road passenger transport	Bus and taxi passenger transport, rental services of passenger cars, buses and coaches with operator, other unscheduled road passenger services	Road freight transport	
	Rail passenger transport	Passenger transport by rail	Rail freight transport	
	Water passenger transport	Passenger transport by international and coastal seagoing vessels and inland water passenger transport	Water freight transport	
	Travel agency services	Reservation services, tour operator services, tourist guide services, visitor information services, ticket selling	Freight agency services	
	Motor vehicle hire or rental	Hiring of cars, trucks, buses, and campervans without operator	Taxis, hiring of motor vehicles with drivers, machinery hire	

Table continues next page

Table 27 continued

Tourism product classification				
Tourism product for provisional tourism satellite accounts	Tourism product for tourism satellite accounts	Includes	Excludes	
Imputed rental on holiday homes	Imputed rental on holiday homes	Imputed rental on second homes used only (or partly) by the owner – these may be made available to third parties for holidays, leisure, and business activities		
Cultural, recreation, and gambling services	Libraries, archives, museums, and other cultural services	Historical sites and buildings, nature reserves, performing arts		
	Other sport and recreation services	Sports and recreational sports facility operation services, amusement park and similar attraction services, other sports and recreation services		
	Gambling services	Casino-based gambling services, lottery, racing, and sports betting services, other gambling services		
Retail sales – alcohol, food, and beverages	Retail sales – alcohol	Alcoholic beverages purchased from liquor stores and other retail outlets	Alcohol sold for consumption on premises	
	Retail sales – food, beverages, tobacco, and other groceries	Supermarkets, speciality stores, and other retail outlets		
Retail sales – fuel and other automotive products	Retail sales – fuel and other automotive products	Petrol, diesel, motor oils, rubber tyres and tubes		
Retail sales – other	Retail sales – clothing and footwear			
	Retail sales – tourism consumer durables	Made-up textile articles, luggage, motor vehicles, pleasure and sporting boats, sports goods		
	Retail sales – retail medicines, toiletries			
	Retail sales – other shopping			

Table continues next page

Table 27 continued

Tourism product classification			
Tourism product for provisional tourism satellite accounts	Tourism product for tourism satellite accounts	Includes	Excludes
Education services	Education services	Spending on education services by international students studying in New Zealand for less than 12 months	Spending on education services by international students studying in New Zealand for more than 12 months
Other tourism products	Financial services	Issuing and negotiating foreign cash and non-trade financial instruments	Financial intermediation services indirectly measured
	General insurance	Travel insurance, other general insurance	Life insurance, superannuation, and health insurance
	Social and health-related services	Health and medical services, social services	
	Other tourism-related services	Telecommunications, postal and courier services, other tourism products	
	Other personal services	Laundry services, hairdressing, beauty services	
Source: Stats NZ			

Appendix 4: Tourism industry concordance

Within the national accounting system, industries are defined as groups of producers that supply particular goods or services. The tourism industry is different. It is defined not by its goods or services, but by the particular group of consumers – tourists – who purchase its output. Tourism industry information is more aggregated in a provisional tourism satellite account than it is for a final tourism satellite account. This is shown in table 28.

Table 28

Tourism industry category for provisional tourism satellite accounts	Tourism industry category for tourism satellite accounts	Tourism industry component	ANZSIC06 industry subdivision/ group code	ANZSICO6 industry subdivision/group title
Tourism-	Tourism-	Accommodation	H44	Accommodation
characteristic industries industries	Food and beverage services	H45	Food and beverage services	
		Road passenger transport	146	Road transport
		Rail passenger transport	147	Rail transport
		Water passenger transport	148	Water transport
		Air passenger transport	149	Air and space transport
		Other transport, transport support, and travel and tour services	150	Other transport
			152	Transport support services
			N722	Travel agency and tour arrangement services
		Rental and hiring services	L661	Motor vehicle and transport equipment rental and hiring
		Arts and recreation	R89	Heritage activities
		services	R90	Creative and performing arts activities
			R91	Sports and recreation activities
			R92	Gambling activities

Table continues next page

Table 28 continued

Tourism industry concordance				
Tourism industry category for provisional tourism satellite accounts	Tourism industry category for tourism satellite accounts	Tourism industry component	ANZSIC06 industry subdivision/ group code	ANZSIC06 industry subdivision/group title
Tourism-related industries	Tourism-related industries	Retail trade	G39	Motor vehicle and motor parts retailing
			G40	Fuel retailing
			G41	Food retailing
			G42	Other store-based retailing
			G43	Non-store retailing and retail commission-based buying and/or selling
		Education and training	P80	Preschool and school education
			P81	Tertiary education
			P82	Adult, community, and other education
All other industries	All non-tourism- related industries			All other ANZSIC06 industries

Note: ANZSIC06 – 2006 Australian and New Zealand Standard Industrial Classification

Source: Stats NZ