

Tourism satellite account: Year ended March 2020

The contribution made by tourism to the New Zealand economy

New Zealand Government



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Purpose and key provisional estimates

Purpose

Tourism satellite account: Year ended March 2020 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 2020 and detailed results for 2019.

Key provisional estimates

Note: The March 2020 annual estimates featured capture a very limited period of the initial emergence and impact of COVID-19 in New Zealand. The extent of COVID-19's impact will be evident in *Tourism satellite account: Year ended March 2021*, to be published in December 2021.

Key provisional estimates for the year ended March 2020:

- Total tourism expenditure was \$41.9 billion, an increase of 2.4 percent (\$1.0 billion) from the previous year.
- International tourism expenditure increased 2.2 percent (\$371 million) to \$17.5 billion, and contributed 20.1 percent to New Zealand's total exports of goods and services.
- International student expenditure (studying less than 12 months) was \$4.2 billion, an increase of 7.7 percent.
- Domestic tourism expenditure increased 2.7 percent (\$629 million) to \$24.4 billion.
- Tourism generated a direct contribution to GDP of \$16.4 billion, or 5.5 percent of GDP.
- The indirect value added of industries supporting tourism generated an additional \$11.3 billion, or 3.8 percent of GDP.
- 225,384 people were directly employed in tourism (8.0 percent of the total number of people employed in New Zealand), an increase of 2.5 percent from the previous year.
- Tourists generated \$3.9 billion in goods and services tax (GST) revenue, with \$1.8 billion coming from international tourists.
- Overseas visitor arrivals to New Zealand decreased 5.6 percent.

Revisions

Tourism satellite account: Year ended March 2020 includes revisions made to both the domestic and international tourism expenditure series. These revisions cause changes to the value of tourism expenditure in the New Zealand economy, and affect the official tourism satellite account (TSA) time series.

Revisions to the expenditure series included:

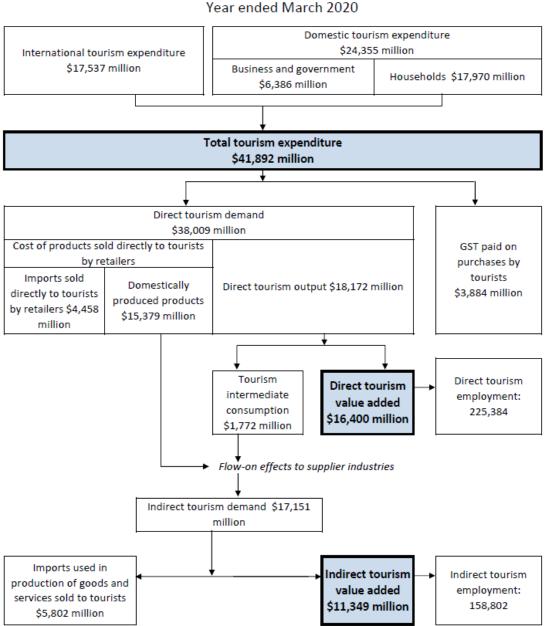
- historic changes to export education source data used to derive international student expenditure from 2016
- methodological improvements:
 - integrating revised annual enterprise survey (AES) data (2015–2018) and 2019 with Household tourism expenditure estimates (HTEE)
 - updated HTEE supplementary data sources
 - national accounts data, including revised nominal GDP statistics from 2007 to 2019 2020 national accounts improvements preview.

Revisions were also made to annual linked employer-employee data and household labour force survey sources used in determining tourism employment.

Tourism industry ratios are impacted because of these expenditure revisions. These ratios are the proportion of an industry's output that is consumed by tourists and are used to calculate valueadded and tourism employment estimates. As a result of the ratio changes, we revised the historical value added-time series. Together with the ratio changes, we also revised the tourism employment time series.

Figure 1 traces the flows of tourism expenditure through the New Zealand economy for the year ended March 2020. 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⁾

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.

Stats NZ

About the tourism satellite account

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.

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 that 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: Year ended March 2020*. 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: Year ended March 2020 presents results for the March 2020 year at the aggregated provisional estimate level in current prices.

<u>Detailed product and industry tables, year ended March 2019</u> 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.

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.

See:

- Results by topic for the year ended March 2020
- Key events that influenced tourism for year ended March 2020
- Key events that influenced tourism for year ended March 2019
- Key events that influenced tourism for year ended March 2018
- Key events that influenced tourism for year ended March 2017

See also section Detailed product and industry tables, year ended March 2019.

Results by topic for the year ended March 2020

Tourism expenditure

Total tourism expenditure increased 2.4 percent to \$41.9 billion, following an increase of 4.4 percent in the March 2019 year.

Tourism expenditure generated \$16.4 billion of direct value added, representing a 5.5 percent contribution to GDP. A further \$11.3 billion of indirect value-added activity was recorded (see <u>table 1</u>).

Tourishi experiancire by component,				, inc. inc. inc. inc. inc. inc. inc. inc.	year endea march 1555-2020				
						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	tourism	Direct tourism value added	Indirect tourism value added	Total tourism value added	
			\$(million))			Percent		
1999	5,160	4,245	4,803	1,162	15,370	5.2	4.3	9.5	
2000	5,713	4,678	5,733	1,281	17,405	5.4	4.4	9.9	
2001	5,970	5,413	5,892	1,423	18,698	5.3	4.8	10.2	
2002	6,515	5,627	6,372	1,535	20,049	5.4	4.7	10.1	
2003	7,493	5,657	6,737	1,652	21,539	6.0	4.5	10.5	
2004	8,001	5,704	6,438	1,703	21,846	6.0	4.2	10.2	
2005	8,496	5,860	6,382	1,808	22,547	5.9	4.1	10.0	
2006	8,865	6,120	6,386	1,902	23,272	5.9	4.0	9.9	
2007	9,221	6,507	6,872	1,994	24,594	5.8	4.1	9.9	
2008	9,872	6,987	6,832	2,052	25,743	5.7	4.0	9.8	
2009	9,209	6,473	8,500	2,098	26,280	5.3	3.7	8.9	
2010	9,522	6,721	7,130	2,050	25,424	5.3	3.7	9.0	
2011	9,700	6,788	7,247	2,227	25,962	5.2	3.6	8.8	
2012	10,036	7,023	7,106	2,435	26,600	5.1	3.6	8.7	
2013	10,286	7,197	7,131	2,462	27,077	5.2	3.6	8.8	
2014	10,906	7,648	7,269	2,593	28,416	5.1	3.6	8.7	
2015	12,626	8,790	7,427	2,896	31,739	5.7	4.0	9.6	
2016	14,494	10,112	7,376	3,293	35,275	6.1	4.3	10.4	
2017	14,430	10,030	8,473	3,385	36,318	5.8	4.0	9.9	
2018	15,452	10,729	9,291	3,688	39,161	5.8	4.0	9.8	
2019	15,945	11,084	10,071	3,791	40,891	5.7	3.9	9.6	
2020P	16,400	11,349	10,260	3,884	41,892	5.5	3.8	9.4	

Tourism expenditure by component,⁽¹⁾ year ended March 1999–2020

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

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.

Note: Figures prior to 2020 have been revised.

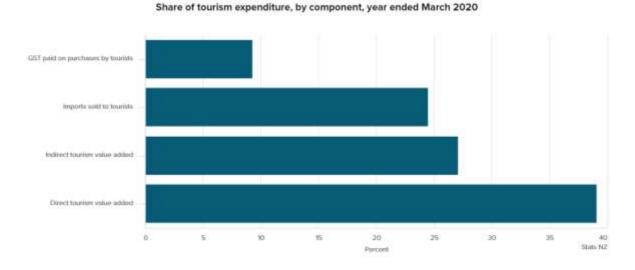
Symbol:

P provisional

Source: Stats NZ

Direct and indirect tourism value added, when combined, accounted for 66.2 cents for every dollar spent by tourists, while GST accounted for 9.3 cents for every dollar spent by tourists. The remainder represents imports (see <u>figure 2</u>).

Figure 2



Note: Individual percentages may not sum to 100 due to rounding. Imports sold to tourists comprise imports used in production of goods and services sold to tourists and imports sold directly to tourists by retailers.

Tourism expenditure by type of tourist

International tourism expenditure increased 2.2 percent, following a 5.2 percent increase in the March 2019 year. Domestic tourism expenditure increased 2.7 percent, following a 3.9 percent increase in the previous year (see <u>table 2</u> and <u>figure 3</u>).

Year ended March	Internation expen		Domestic tourism expenditure		Total tourism expenditure		Total exports of goods and services	International tourism as a percentage of total exports
	\$(million)	Annual percentage	\$(million)	Annual percentage	\$(million)	Annual percentage	\$(million)	Percent
		change		change		change		
1999	5,999		9,371		15,370		31,639	19.0
2000	7,122	18.7	10,284	9.7	17,405	13.2	35,045	20.3
2001	8,169	14.7	10,529	2.4	18,698	7.4	42,837	19.1
2002	8,989	10.0	11,060	5.0	20,049	7.2	45,604	19.7
2003	9,494	5.6	12,044	8.9	21,539	7.4	44,403	21.4
2004	9,603	1.1	12,243	1.6	21,846	1.4	43,119	22.3
2005	9,987	4.0	12,560	2.6	22,547	3.2	45,662	21.9
2006	10,065	0.8	13,207	5.1	23,272	3.2	46,087	21.8
2007	10,676	6.1	13,917	5.4	24,594	5.7	50,928	21.0
2008	11,010	3.1	14,733	5.9	25,743	4.7	54,645	20.1
2009	10,927	-0.8	15,354	4.2	26,280	2.1	60,759	18.0
2010	10,316	-5.6	15,108	-1.6	25,424	-3.3	55,832	18.5
2011	10,090	-2.2	15,872	5.1	25,962	2.1	61,559	16.4
2012	10,151	0.6	16,449	3.6	26,600	2.5	64,749	15.7
2013	9,958	-1.9	17,119	4.1	27,077	1.8	62,766	15.9
2014	10,444	4.9	17,973	5.0	28,416	4.9	67,076	15.6
2015	12,426 R	19.0 R	19,313 R	7.5 R	31,739 R	11.7 R	67,906 R	18.3 R
2016	14,864 R	19.6 R	20,411 R	5.7 R	35,275 R	11.1 R	71,134 R	20.9 R
2017	14,796 R	-0.5 R	21,522 R	5.4 R	36,318 R	3.0 R	71,861 R	20.6 R
2018	16,320 R	10.3 R	22,840 R	6.1 R	39,161 R	7.8 R	79,609 R	20.5 R
2019	17,166 R	5.2 R	23,726 R	3.9 R	40,891 R	4.4 R	84,632 R	20.3 R
2020P	17,537	2.2	24,355	2.7	41,892	2.4	87,206	20.1

Tourism expenditure by type of tourist,⁽¹⁾ year ended March 1999–2020

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

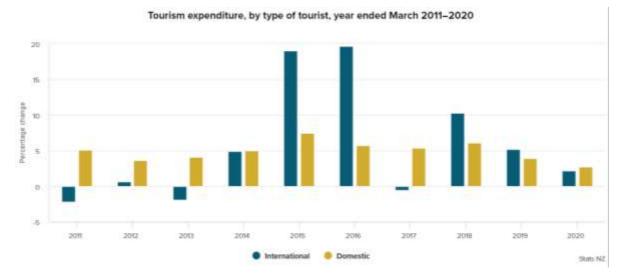
Symbols:

P provisional

R revised

... not applicable

Figure 3



Exports

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

In the year ended March 2020, international tourism's contribution to total exports was \$17.5 billion (20.1 percent of exports). The export receipts from dairy products, including casein, totalled \$17.1 billion (19.7 percent of exports).

Note that international tourism is compared with selected primary exports.

	Selected export									
Year ended March	International tourism	Dairy products, including casein	Meat and meat products	Wood and wood products	Fruit	Seafood				
			\$(m	illion)						
1999	5,999	4,703	2,843	2,348	909	1,173				
2000	7,122	4,460	3,198	2,950	1,059	1,199				
2001	8,169	6,167	3,854	3,635	1,074	1,334				
2002	8,989	7,491	4,414	3,536	1,051	1,388				
2003	9,494	5,919	4,242	3,653	1,054	1,309				
2004	9,603	5,707	4,232	3,076	1,047	1,062				
2005	9,987	5,678	4,688	3,203	1,356	1,136				
2006	10,065	5,884	4,411	3,116	1,181	1,146				
2007	10,676	7,332	4,813	3,497	1,191	1,193				
2008	11,010	9,277	4,416	3,406	1,298	1,098				
2009	10,927	9,975	5,432	3,619	1,497	1,289				
2010	10,316	8,972	4,997	3,767	1,586	1,201				
2011	10,090	11,576	5,199	4,413	1,446	1,350				
2012	10,151	12,704	5,389	4,327	1,583	1,388				
2013	9,958	12,349	5,279	4,385	1,568	1,369				
2014	10,444	15,896	5,492	5,154	1,548	1,337				
2015	12,426 R	14,168	6,194	4,633	1,758	1,380				
2016	14,864 R	12,346	6,580	4,855	2,362	1,527				
2017	14,796 R	12,374	5,983	5,315	2,758	1,586				
2018	16,320 R	15,078	6,797	6,144	2,648	1,619				
2019	17,166 R	15,574	7,632	6,773	3,294	1,696				
2020P	17,537	17,146	8,301	5,916	3,518	1,814				

International tourism expenditure compared with selected primary exports,⁽¹⁾ year ended March 1999–2020

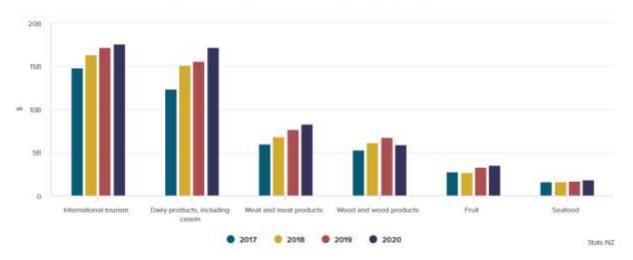
1. Exports are valued fob (free on board - the value of goods at New Zealand ports before export) and include re-exports.

Symbols:

P provisional

R revised

Figure 4



International tourism expenditure compared with selected primary exports, year ended March 2017-2020

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 2020, expenditure reached \$4.2 billion, an increase of 7.7 percent (see <u>table 4</u> and <u>figure 5</u>). The number of short-term arrivals for education purposes (studying for less than 12 months) totalled 70,389, up 4.8 percent (see <u>table 8</u>).

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.

International student expenditure – studying less than 12 months, year ended March 1999–2020

Year	International stud studying less t	ent expenditure – han 12 months	International tourism expenditure			
ended March	\$(million)	Annual percentage change	\$(million)	Annual percentage change		
1999	294		5,999			
2000	327	11.2	7,122	18.7		
2001	452	38.2	8,169	14.7		
2002	797	76.6	8,989	10.0		
2003	1,156	45.0	9,494	5.6		
2004	1,587	37.3	9,603	1.1		
2005	1,796	13.2	9,987	4.0		
2006	1,840	2.4	10,065	0.8		
2007	1,822	-1.0	10,676	6.1		
2008	1,864	2.3	11,010	3.1		
2009	1,881	0.9	10,927	-0.8		
2010	2,008	6.7	10,316	-5.6		
2011	2,058	2.5	10,090	-2.2		
2012	2,050	-0.4	10,151	0.6		
2013	2,060	0.5	9,958	-1.9		
2014	2,273	10.4	10,444	4.9		
2015	2,659 R	17.0 R	12,426	R 19.0 R		
2016	2,955 R	11.1 R	14,864	R 19.6 R		
2017	3,087 R	4.5 R	14,796	R -0.5 R		
2018	3,534 R	14.5 R	16,320	R 10.3 R		
2019	3,905 R	10.5 R	17,166	R 5.2 R		
2020P	4,207	7.7	17,537	2.2		

Symbols:

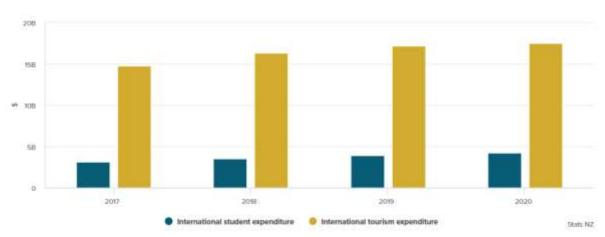
P provisional

R revised

... not applicable

Source: Stats NZ

Figure 5



International student (studying less than 12 months) expenditure and international tourism expenditure (\$), year ended March 2017–2020

Cruise ship expenditure in New Zealand

We present cruise ship expenditure in New Zealand on a year ended June basis (2017–2020) to best align with the cruise season and cruise traveller statistics (see <u>table 5</u> and <u>table 6</u>).

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 several 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.

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.

Cruise ship expenditure by international visitors has additional methodological information.

In the year ended June 2020, cruise ship expenditure in New Zealand totalled \$547.1 million, a decrease of 3.2 percent (see <u>table 5</u>).

Auckland and Tauranga ports recorded the largest total spending. In the year ended June 2020, Auckland spend totalled \$207.6 million, up 9.5 percent, with Tauranga recording \$74.3 million, down 16.8 percent (see <u>table 6</u>).

<u>Cruise ship traveller and expenditure statistics: Year ended June 2020</u> has additional information surrounding COVID-19's impact on the sector, as well as cruise traveller statistics.

Table 5

Cruise ship expenditure in New Zealand,⁽¹⁾ year ended June 2017–2020

	<u> </u>		-						
		June	year		Change from	Change from	Change from		
Component	2017 R	2018 R	2019 R	2020	2017 to 2018	2018 to 2019	2019 to 2020		
	\$(000)					Annual percentage change			
Vessel ⁽²⁾	116,580	104,462	141,820	138,664	-10.4	35.8	-2.2		
Visitor ⁽³⁾	247,499	296,833	369,478	356,413	19.9	24.5	-3.5		
GST	35,997	43,251	53,890	51,978	20.2	24.6	-3.5		
Total	400,076	444,546	565,189	547,055	11.1	27.1	-3.2		

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

2. Comprises shipping agents (ship visit logistics), bunkering (providing marine fuels), and providoring (providing produce and other supplies).

Incorporates shore excursions (predominantly pre-booked), including overland tours, and spending ashore by passengers and crew.
 Symbol:

R revised

year ended Jun		June	year	Change from	Change from	Change from	
Region by port	2017 R	2018 R	2019 R	2020	2017 to 2018	-	-
	\$(000)				Annua	al percentage c	hange
Northland					•		
Bay of Islands ⁽²⁾⁽³⁾	10,088	16,157	20,327	23,738	60.2	25.8	16.8
Auckland							
Auckland ⁽²⁾⁽⁴⁾	134,350	145,985	189,577	207,595	8.7	29.9	9.5
Waikato							
Mercury Bay ⁽²⁾⁽⁵⁾	С	С	С	С	С	С	С
Bay of Plenty							
Tauranga ⁽²⁾⁽⁶⁾	70,421	66,955	89,234	74,267	-4.9	33.3	-16.8
Gisborne							
Gisborne ⁽²⁾⁽⁷⁾	С	С	С	С	С	С	С
Hawke's Bay							
Napier ⁽²⁾	19,180	26,972	28,405	27,445	40.6	5.3	-3.4
Taranaki							
New Plymouth ⁽²⁾	С	С	С	С	С	С	С
Wellington							
Wellington ⁽²⁾⁽⁸⁾	41,277	49,436	59,201	53,058	19.8	19.8	-10.4
Tasman/Nelson	1,485	699	1,358	1,584	-52.9	94.3	16.6
Golden Bay ⁽²⁾⁽⁹⁾	С	С	С	С	С	С	С
Nelson ⁽²⁾	С	С	С	С	С	С	С
Marlborough							
Picton ⁽²⁾⁽¹⁰⁾	13,426	20,042	23,503	29,114	49.3	17.3	23.9
West Coast							
Jackson Bay ⁽²⁾	С	С	С	С	С	С	С
Canterbury	44,901	48,610	55,280	52,792	8.3	13.7	-4.5
Akaroa ⁽²⁾	40,453	42,016	45,348	37,606	3.9	7.9	-17.1
Lyttelton ⁽²⁾	3,518	5,985	8,338	12,710	70.1	39.3	52.4
Timaru ⁽²⁾	С	С	С	С	С	С	С
Kaikoura ⁽²⁾	С	С	С	С	С	С	С
Otago							
Port Chalmers ⁽²⁾⁽¹¹⁾	43,304	47,969	60,241	49,816	10.8	25.6	-17.3
Southland	8,330	8,015	14,635	10,785	-3.8	82.6	-26.3
Bluff ⁽²⁾	С	С	С	С	С	С	С
Fiordland ⁽¹²⁾	С	С	С	С	С	С	С
Stewart Island ⁽²⁾	С	С	С	C	С	С	С
Other ⁽¹³⁾	10,785	11,842	19,114	13,810	9.8	61.4	-27.7
Total spend ⁽¹⁴⁾	400,076	444,546	565,189	547,055	11.1	27.1	-3.2

Cruise ship expenditure in New Zealand,⁽¹⁾ by regions and ports visited, year ended June 2017–2020

Cruise ship expenditure covers both vessel and visitor. A breakdown is not possible due to businesses providing confidential Port level data.
 At these ports, cruise travellers can potentially disembark and spend locally and within the wider region. Spending pre- and post- cruise, along with overland tours, is also included.

3. Includes Whangārei and Whangaroa.

4. Includes Waiheke Island and Great Barrier Island.

5. Includes Whitianga, Tairua and elsewhere in Mercury Bay.

6. Includes Rotorua and White Island.

7. Includes Tolaga Bay.

8. Includes Kapiti Island.

9. Includes Kaiteriteri, Tarakohe, Torrent Bay and elsewhere in Golden Bay.

10. Includes Motuara Island, Ship Cove, and elsewhere in the Marlborough Sounds.

11. Includes Dunedin.

12. At these ports, passengers are generally unlikely to disembark and spend money locally.

Includes all other locations, spending on cruises with New Zealand resident businesses, and unallocated shore excursion spend by Port.
 The sum of regions does not match total spend due to confidential cells.

Symbols:

R revised

C confidential

Employment

In the year ended March 2020, tourism directly employed 225,384 people (see <u>table 7</u> and <u>figure 6</u>).

Tourism activity directly generated 8.0 percent of total employment in New Zealand (see <u>table 7</u>). This compares with tourism generating 5.5 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.

A further 158,802 were indirectly employed in tourism generating an additional 5.6 percent share of total employment.

Table 7

Touris	in employi	nent, Sy	ear enueu	Warch 20	100-2020		
Year	N	umber of peop	le	Number of people employed in tourism as a percentage of the total number of people employed			
ended March	Directly employed in tourism	Indirectly employed in tourism	Total tourism employment	Directly employed in tourism	Indirectly employed in tourism Percent	Total tourism employment	
	450.007	400.000	244.005			16.9	
2000	152,607	162,288	314,895	8.2 8.3	8.7 8.3	16.9	
2001 2002	157,386 162,042	157,302 149,610	314,688 311,652	0.3 8.3	0.3 7.7	16.0	
2002	162,042	149,610	319,587	0.3 8.4	7.4	15.9	
2003	177,861	149,622	319,567	0.4 8.5	6.8	15.9	
2004	184,761	141,070	321,579	0.5 8.5	6.3	15.5	
2005	190,893		328,248	0.5 8.5	6.1	14.0	
2008		137,355 136,791	320,240	0.5 8.6	6.0	14.7	
2007	197,025 198,216	136,791	335,844	8.5	5.9	14.0	
2008	198,555	137,028	335,604	8.5	5.9	14.5	
2009	187,083	128,868	315,951	8.2	5.5	14.4	
2010	181,881	120,000	306,360	8.0	5.4	13.4	
2012	175,863	124,475	296,331	7.6	5.2	12.8	
2012	173,724	120,400	292,368	7.5	5.1	12.6	
2013	175,023	119,319	292,300	7.3	5.0	12.0	
2014	191,796	133,167	324,963	7.8	5.4	13.2	
2015	210,126	146,187	356,313	8.3	5.8	14.1	
2010	208,323	144,774	353,097	8.0	5.6	13.6	
2017	200,323	152,718	373,875	8.3	5.7	13.0	
2018	221,157	152,718	373,875	8.0	5.7	14.0	
2019 2020P	219,007	151,200	384,186	8.0	5.6	13.0	
20205	220,004	100,002	304,100	0.0	0.0	13.7	

Tourism employment,⁽¹⁾⁽²⁾ year ended March 2000-2020

1. Data is only available from 2000. For more details refer to appendix 3.

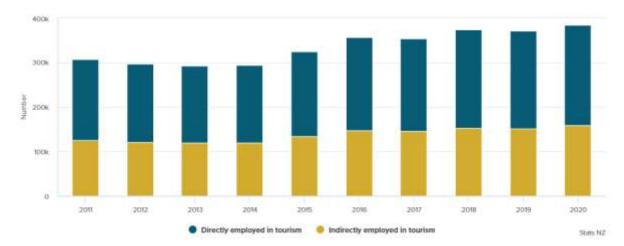
2. Individual figures may not sum to stated totals due to rounding.

Note: Figures prior to 2020 have been revised.

Symbol:

P provisional

Figure 6



Number of people employed in tourism, year ended March 2011-2020

Overseas visitor arrivals

Everyone who completes border clearance, regardless of whether they travel by air or by sea, is counted in the arrivals/departures of International travel statistics. Transit passengers who do not complete border clearance are not included in international travel statistics.

With regard to cruise ship travellers, based on analysis covering 2015–2020, about three-quarters of cruise ship passengers visiting New Zealand are transit passengers. These travellers are not included in international travel statistics. The remaining one-quarter are passengers who enter or leave New Zealand by air, before or after travelling by cruise ship. These passengers complete border clearance, which includes completing arrival cards, and are included in international statistics.

The number of international visitors decreased 5.6 percent (215,789) in the year ended March 2020, following an increase of 1.3 percent in the previous year. Visitor numbers from Asia and the Americas experienced their first annual declines following six consecutive years of increases.

The number of visitors from Asia decreased 14.7 percent (149,984), following a 1.2 percent increase in the previous year. Visitor numbers from the Americas decreased 5.4 percent (26,440), while visitors from Europe decreased 5.3 percent (29,443).

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

- holiday down 9.0 percent (180,729 arrivals)
- visiting friends and relatives down 2.3 percent (24,252)
- conference and conventions up 6.6 percent (5,042)
- business up 6.4 percent (19,525)
- education up 4.8 percent (3,231).

See <u>table 8</u> and <u>figure 7</u> for a breakdown of international visitors by region of last permanent residence and by purpose of visit for the years ended March 2017–2020.

Overseas visitor arrivals,⁽¹⁾⁽²⁾ year ended March 2017–2020

		Year ended March								
	2017	2018	2019	2020	2018	2019	2020			
		Num	ber		Annua	percentage	change			
By region of last permanent residence										
Oceania	1,568,688	1,663,904	1,669,170	1,665,076	6.1	0.3	-0.2			
Asia	923,056	1,009,856	1,022,191	872,207	9.4	1.2	-14.7			
Europe	537,600	587,520	558,681	529,238	9.3	-4.9	-5.3			
Americas	426,384	474,560	493,760	467,320	11.3	4.0	-5.4			
Other ⁽³⁾⁽⁴⁾	78,000	76,272	120,216	118,126	-2.2	57.6	-1.7			
Total ⁽⁶⁾	3,543,631	3,819,817	3,867,756	3,651,967	7.8	1.3	-5.6			
		By pu	rpose of vis	sit						
Holiday	1,841,728	2,010,992	2,007,510	1,826,781	9.2	-0.2	-9.0			
Visiting friends & relatives	1,023,088	1,101,856	1,073,853	1,049,601	7.7	-2.5	-2.3			
Conferences & conventions	68,976	74,256	76,855	81,897	7.7	3.5	6.6			
Business	295,184	299,072	305,902	325,427	1.3	2.3	6.4			
Education	65,904	67,104	67,158	70,389	1.8	0.1	4.8			
Other ⁽⁴⁾⁽⁶⁾	238,848	258,832	332,740	297,872	8.4	28.6	-10.5			

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

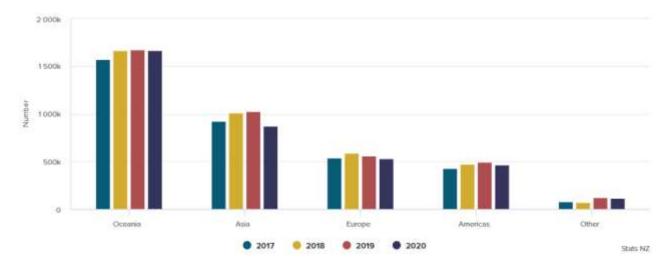
 As of November 2018, reporting of countries and travel purpose moved to a full capture system. This has resulted in an increase in the not stated category since then.

These totals are actual counts, and may differ from the sum of individual figures for different countries, which are derived from samples.

6. Includes unspecified.

Source: Stats NZ

Figure 7



Overseas visitor arrivals, by region of residence, year ended March 2017-2020

<u>Table 9</u> presents the breakdown of international visitors by selected country of last permanent residence for the years ended March 2017–2020 (see also <u>figure 8</u>).

Table 9

Selected overseas visitor arrivals, (1)(2	²⁾ year ended March 2017–2020
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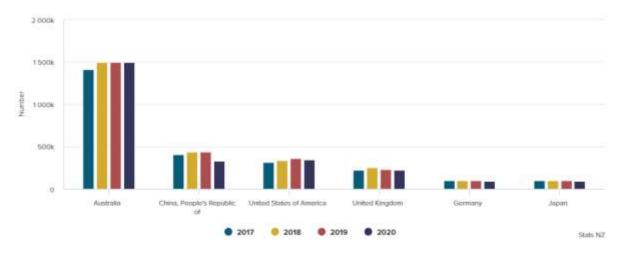
			Ye	ar ended Mar	ch	Annual percentage change 6.3 -0.3 (8.2 -0.8 -2 8.7 6.5 - 4.4 -9.6 -					
	2017	2018	2019	2020	2018	2019	2020				
		Nur	nber	Annua	l percentage	change					
By country of last permanent residence											
Australia	1,406,256	1,495,392	1,491,000	1,491,252	6.3	-0.3	0.0				
China, People's Republic of	404,384	437,696	434,323	328,145	8.2	-0.8	-24.4				
United States of America	312,816	340,144	362,394	347,629	8.7	6.5	-4.1				
United Kingdom	222,784	254,832	230,307	223,102	14.4	-9.6	-3.1				
Germany	102,608	102,864	102,107	91,067	0.2	-0.7	-10.8				
Japan	102,320	102,416	99,300	90,326	0.1	-3.0	-9.0				

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

2. These totals are derived from sample counts.

Source: Stats NZ

Figure 8



Overseas visitor arrivals, by selected country of residence, year ended March 2017-2020

By country of last permanent residence, the majority of short-term visitor arrivals to New Zealand in the year ended March 2020 originated from these selected markets:

- Australia up 0.0 percent (252 arrivals)
- China down 24.4 percent (106,178)
- United States of America down 4.1 percent (14,765)
- United Kingdom down 3.1 percent (7,205)
- Germany down 10.8 percent (11,040)
- Japan down 9.0 percent (8,974).

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.

<u>Table 10</u> presents the breakdown of guest nights by origin, sourced from Stats NZ's accommodation survey, for the years ended March 2016–2019 (see also <u>figure 9</u>).

Note: The accommodation survey is no longer produced by Stats NZ. Results featured are up to the March 2019 year, with the last results for the September 2019 month published in November 2019.

In the year ended March 2019, 40.2 million guest nights were spent in short-term commercial accommodation, a 0.6 percent increase compared with the previous year. This follows an increase of 3.9 percent in the year ended March 2018 and an increase of 3.2 percent in the year ended March 2017. For the first time in five years, the percentage change in international guest nights was below that of domestic.

Table 10

Guest nights by origin,⁽¹⁾ year ended March 2016–2019

Year	International	guest nights	Domestic g	juest nights	Total gue	est nights	
ended March	Number (000)	Annual percentage change	Number (000) Annual percentage change		Number (000)	Annual percentage change	
2016	15,265		21,963		37,229		
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	
2019	17,380	-1.2	22,802	2.1	40,182	0.6	

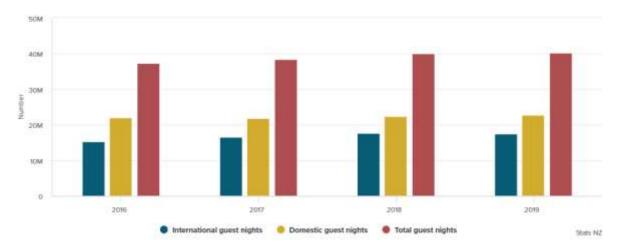
1. Individual figures may not sum to stated totals due to rounding.

Symbol:

... not applicable

Source: Stats NZ

Figure 9



Number of guest nights, by origin, year ended March 2016-2019

- Significant events in the year ended March 2020 included:
 - The COVID-19 pandemic caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was first identified in December 2019 in Wuhan, China.
 - The World Health Organization declared the outbreak a public health emergency of international concern in January 2020 and a pandemic in March 2020.
 - New Zealand recorded its first COVID-19 case on 28 February 2020.
 - On 14 March, the Government announced anyone entering New Zealand must selfisolate for 14 days, except those arriving from the Pacific.
 - On 19 March, all indoor gatherings of more than 100 people were cancelled, and borders closed to all but New Zealand citizens and permanent residents.
 - On 21 March, the Government introduced a 4-tiered alert level system to help combat COVID-19 with New Zealand at alert level 2.
 - On 23 March, New Zealand moved to alert level 3.
 - On 25 March, at 12.21pm, a state of national emergency was declared. At 11:59pm, New Zealand moved to alert level 4, and the entire nation went into self-isolation.
 - A volcanic eruption on Whakaari/White Island in December 2019 resulted in the death of 22 people, including two who are missing and declared dead, and a further 25 people suffered serious injuries.
 - Cathay Pacific took over Air New Zealand's summer operations of the Hong Kong-Auckland return service covering the first quarter of 2020. This was in response to issues encountered with Rolls-Royce engines on its Boeing 787-9 aircraft first encountered in December 2017.
 - Air New Zealand commenced non-stop services between Auckland and Seoul in November 2019.
 - Jetstar withdrew regional services at the end of November 2019 between Auckland and Napier, Nelson, New Plymouth, and Palmerston North, as well as between Nelson and Wellington.
 - In response to Jetstar's withdrawal of regional services, Air New Zealand announced additional services between Auckland and Napier, New Plymouth, Nelson and Palmerston North, as well as between Nelson and Wellington.
 - Air New Zealand commenced a direct scheduled jet service between Auckland and Invercargill in late August 2019.
 - Air New Zealand and Cathay Pacific extended their joint venture alliance for a further five years.
 - Air Chatham's began an Auckland to Norfolk Island service in September 2019.
 - Singapore Airlines increased the number of services on the Wellington-Singapore route via Melbourne while introducing the A350-900 aircraft.
 - Cathay Pacific commenced a third summer season between Christchurch and Hong Kong featuring additional flights and capacity.
 - Korean Air commenced 10 summer seasonal return services between Christchurch and Seoul Incheon from late December 2019.
 - The Easter public holidays occurred in the year ended March 2020, partly in the year ended March 2019 and 2018, and did not occur in the year ended March 2017.

- Significant changes to flights in the year ended March 2019 included:
 - Air New Zealand added six additional weekly return services between Auckland and Dunedin.
 - Air New Zealand added 12 additional weekly flights between Palmerston North and Auckland, and 12 additional weekly flights between Napier and Auckland.
 - Air New Zealand increased its service between Queenstown and Wellington to two return flights daily from November to March.
 - Air New Zealand suspended its service between Auckland and the Kāpiti Coast.
 - o Air New Zealand began non-stop services between Auckland and Taipei.
 - Air New Zealand launched services between Auckland and Chicago using a Boeing 787-9 Dreamliner.
 - Air New Zealand began two new trans-Tasman routes services between Queenstown and Brisbane, and between Wellington and Brisbane.
 - Air New Zealand added additional services from Auckland and Christchurch to Melbourne, Brisbane, and Sydney.
 - Air New Zealand added a Monday return service between Auckland and Gold Coast.
 - Air New Zealand increased its service between Auckland and Bali to five times a week during peak times.
 - Air New Zealand increased its service between Auckland and Honolulu from April to October, adding almost 60,000 extra seats.
 - Air New Zealand added 16,000 seats on its service between Auckland and Houston from March to October.
 - Air New Zealand increased its capacity on the service between Auckland and Vancouver during the year.
 - Air New Zealand added nearly 6,000 seats to its seasonal service between Christchurch and Nadi.
 - Air New Zealand and Qantas agreed to codeshare on New Zealand and Australia domestic networks.
 - Air New Zealand and Virgin Australia ended their trans-Tasman alliance.
 - Air New Zealand and Singapore Airlines increased services to daily between Auckland and Singapore from October to March.
 - o Emirates began a new daily service from Auckland to Bali then onto Dubai.
 - Air Tahiti began a service between Auckland and Papeete flying three times a week.
 - Virgin Australia resumed their winter service between Christchurch and Rarotonga from June to October.
 - Singapore Airlines rerouted the service between Wellington and Singapore through Melbourne.
 - China Southern Airlines commenced a Boeing 787-9 service between Christchurch and Guangzhou.

- Significant changes to flights in the year ended March 2018 included:
 - Air New Zealand added 180,000 extra domestic seats across its network between November 2017 and March 2018.
 - 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 commenced services between Auckland and Haneda Tokyo.
 - 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.
 - 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.
 - Air New Zealand leased Airbus 330 and Airbus 340 from Hi Fly to operate some Auckland–Sydney and Auckland–Perth services.
 - 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.
 - The temporary shut-down of Refining New Zealand's pipeline into Auckland impacted airlines operations into and out of Auckland Airport.
 - 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.
 - Sounds Air ceased flights between Blenheim and Kaikoura.
 - Sounds Air added new flights on the Wellington to Blenheim route.
 - 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.
 - Thai Airways increased its services from Bangkok to Auckland, offering daily flights.
 - \circ $\;$ Nauru Airlines began services from Norfolk Island to Auckland.
 - Virgin Australia began after-dark services between Brisbane and Queenstown.

- Qantas began after-dark services between Sydney and Queenstown.
- o Jetstar reintroduced services between Wellington and Queenstown.
- The 2017 British and Irish Lions Rugby Tour generated international and domestic tourism activity within New Zealand during the year ended March 2018.

• Significant changes to flights in the year ended March 2017 included:

•

- Air New Zealand and Jetstar commenced evening flights into Queenstown, following investment in a series of major airfield infrastructure improvements.
- Air New Zealand began operating an all-jet-schedule between Dunedin and Wellington on weekdays.
- Air New Zealand increased capacity on several regional routes including Auckland– Kerikeri, Auckland–Rotorua, Gisborne–Auckland, and Gisborne–Wellington.
- New Zealand suspended services between Whanganui–Auckland and Blenheim– Christchurch.
- o Air New Zealand reinstated seasonal flights between Auckland and Osaka.
- o Air New Zealand began services between Auckland and Ho Chi Minh City.
- Air New Zealand began Boeing 787-9 Dreamliner services between Auckland and Hawaii.
- Air New Zealand began Boeing 787-9 Dreamliner services on the Auckland–Buenos Aires route.
- Air New Zealand and Singapore Airlines announced the extension of their alliance to include travel between Wellington and Singapore.
- 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.
- o Air Chathams began scheduled services between Auckland and Whanganui.
- Sounds Air began services between Christchurch and Blenheim.
- Kiwi Regional Airlines ceased operations.
- 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.
- United Airlines began flights between Auckland and San Francisco.
- \circ $\;$ 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 allyear-round service.
- More than 300 additional return flights were provided direct to Christchurch from Sydney, Melbourne, and Brisbane during the ski season.
- Asiana Airlines began a summer charter service between Christchurch and Incheon.
- Emirates introduced the A380 on its Christchurch–Sydney–Dubai service.
- Fiji airways began a third service between Christchurch and Nadi.
- China Southern Airlines increased its services into Christchurch over the summer season.
- Singapore Airlines began the Capital Express service from Singapore via Wellington via Canberra.
- Jetstar suspended direct flights between Wellington to Melbourne.
- *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 2020 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.

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 <u>table 11</u>.

Table 11

Tourism expenditure by type of product,⁽¹⁾⁽²⁾ year ended March 2017–2020

			Year	ended Mar	ch		
Product	2017	2018	2019	2020P	2018	2019	2020P
		\$(mill	ion)		Annual p	bercentag	e change
Accommodation services	2,891	3,158	3,302	3,323	9.2	4.6	0.6
Food and beverage serving services	4,209	4,596	4,701	4,838	9.2	2.3	2.9
Air passenger transport	5,043	5,210	5,570	5,384	3.3	6.9	-3.3
Other passenger transport	4,068	4,332	4,575	4,596	6.5	5.6	0.5
Imputed rental on holiday homes	784	815	847	895	4.0	3.9	5.7
Cultural, recreation, and gambling services	1,011	1,085	1,128	1,167	7.3	4.0	3.5
Retail sales - alcohol, food, and beverages	2,267	2,452	2,439	2,516	8.2	-0.5	3.2
Retail sales - fuel and other automotive products	1,898	2,062	2,268	2,350	8.6	10.0	3.6
Retail sales – other	7,018	7,648	7,841	8,154	9.0	2.5	4.0
Education services	876	995	1,159	1,342	13.6	16.5	15.8
Other tourism products	2,867	3,120	3,269	3,445	8.8	4.8	5.4
Total tourism demand excluding GST	32,933	35,472	37,100	38,009	7.7	4.6	2.5
GST paid on purchases by tourists	3,385	3,688	3,791	3,884	9.0	2.8	2.5
Total tourism expenditure	36,318	39,161	40,891	41,892	7.8	4.4	2.4

1. All product values are in producers' prices.

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

Note: Figures for years prior to 2020 have been revised.

P provisional

Source: Stats NZ

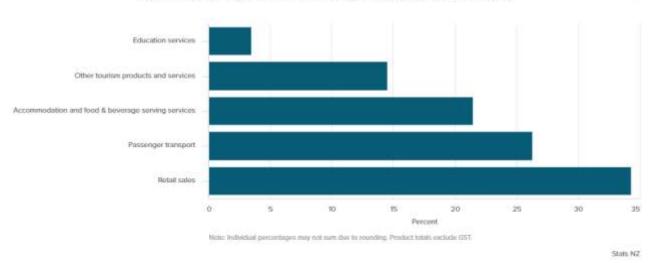
Table 11 shows that for the year ended March 2020:

- Total tourism expenditure increased 2.4 percent, following increases of 4.4 percent in 2019 and 7.8 percent in 2018.
- The strongest increases in tourism expenditure were in:
 - retail sales other, increased \$313 million (4.0 percent)
 - o education services, increased \$183 million (15.8 percent)
 - other tourism products, increased \$176 million (5.4 percent).
- The sole decrease in tourism expenditure was in air passenger transport, down \$186 million (3.3 percent).

The main products tourists purchased were retail sales and passenger transport, which contributed 34.3 percent and 26.3 percent, respectively. Tourists spent 21.5 percent of their budget on accommodation, and food and beverage serving services. They spent 14.5 percent on other tourism products and services, and 3.5 percent on education services (see <u>figure 10</u>, which presents the share of tourism expenditure, excluding GST).

Symbol:

Figure 10



Share of tourism expenditure, by type of product, year ended March 2020

<u>Table 12</u> presents tourism expenditure by type of product and by type of tourist for the years ended March 2017–2020. 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 2020:

- Total household tourism expenditure increased 1.8 percent, following an increase of 0.7 percent the previous year.
- The increase in household tourism expenditure was strongest in retail sales other, up \$256 million. Education services increased \$117 million from the previous year, with other tourism products increasing \$112 million.
- Between 2017 and 2020, total household tourism spending increased 9.2 percent. Over the same period, total household consumption expenditure increased 18.1 percent.
- Total spending by international tourists in New Zealand increased 2.2 percent, following an increase of 5.2 percent in the March 2019 year, and an increase of 10.3 percent in the March 2018 year.
- The increase in international tourism expenditure was strongest in education services, up \$66 million. Retail sales other increased \$56 million from the previous year, while accommodation services increased \$55 million.

Tourism expenditure,⁽¹⁾⁽²⁾ by type of product and type of tourist, year ended March 2017–2020

	-			-		
	Domestic	demand				
Product	Business and government demand	Household demand	International demand	Total demand	Total supply	Tourism product ratio
	:	2017				
Accommodation services	597	681	1,612	2,891	3,024	0.96
Food and beverage serving services	417	1,457	2,335	4,209	9,860	0.43
Air passenger transport	1,446	1,315	2,281	5,043	5,099	0.99
Other passenger transport	1,653	1,312	1,103	4,068	5,867	0.69
mputed rental on holiday homes	0	784	0	784	784	1.00
Cultural, recreation, and gambling services	0	622	389	1,011	4,398	0.23
Retail sales – alcohol, food, and beverages	0	1,861	406	2,267	61,591	0.04
Retail sales - fuel and other automotive products	672	606	621	1,898	9,856	0.19
Retail sales – other	0	4,505	2,513	7,018	52,149	0.13
ducation services	0	282	594	876	6,174	0.14
Other tourism products	274	1,181	1,412	2,867	47,250	0.06
otal tourism demand excluding GST	5,059	14,606	13,268	32,933		
GST paid on purchases by tourists	6	1,851	1,528	3,385		
Total tourism expenditure	5,065	16,457	14,796	36,318		
		2018				
Accommodation services	624	747	1,786	3,158	3,313	0.95
ood and beverage serving services	418	1,596	2,582	4,596	10,615	0.43
Air passenger transport	1,511	1,222	2,478	5,210	5,245	0.99
Other passenger transport	1,692	1,417	1,223	4,332	6,281	0.69
mputed rental on holiday homes	0	815	0	815	815	1.00
Cultural, recreation, and gambling services	0	654	431	1,085	4,446	0.24
Retail sales – alcohol, food, and beverages	0	2,002	450	2,452	68,165	0.04
Retail sales - fuel and other automotive products	748	626	688	2,062	11,135	0.19
Retail sales – other	0	4,853	2,794	7,648	55,357	0.14
ducation services	0	343	652	995	6,366	0.16
Other tourism products	303	1,274	1,543	3,120	50,129	0.06
fotal tourism demand excluding GST	5,296	15,550	14,627	35,472		
GST paid on purchases by tourists	6	1,989	1,693	3,688		
Total tourism expenditure	5,302	17,539	16,320	39,161		

Table continues next page

Table 12 continued

Tourism expenditure, ⁽¹⁾⁽²⁾ by type of	of product and type of	of tourist,	year end	ed March	2017-2020
	Demostic demond				

	Domestic demand					
Product	Business and government demand	Household demand	International demand	Total demand	Total supply	Tourism product ratio
			\$(million)			
	1	2019				
Accommodation services	648	784	1,871	3,302	3,470	0.95
Food and beverage serving services	438	1,571	2,692	4,701	11,212	0.42
Air passenger transport	1,844	1,067	2,659	5,570	5,615	0.99
Other passenger transport	1,913	1,385	1,277	4,575	6,922	0.66
Imputed rental on holiday homes	0	847	0	847	847	1.00
Cultural, recreation, and gambling services	0	678	449	1,128	4,577	0.25
Retail sales – alcohol, food, and beverages	0	1,970	469	2,439	72,054	0.03
Retail sales - fuel and other automotive products	885	664	719	2,268	13,428	0.17
Retail sales – other	0	4,927	2,914	7,841	58,256	0.13
Education services	0	431	728	1,159	6,642	0.17
Other tourism products	332	1,324	1,613	3,269	53,642	0.06
Total tourism demand excluding GST	6,061	15,648	15,391	37,100		
GST paid on purchases by tourists	7	2,010	1,775	3,791		
Total tourism expenditure	6,067	17,658	17,166	40,891		
	2	020P				
Accommodation services	692	705	1,926	3,323	3,482	0.95
Food and beverage serving services	467	1,633	2,738	4,838	11,380	0.43
Air passenger transport	1,984	754	2,646	5,384	5,415	0.99
Other passenger transport	1,963	1,327	1,306	4,596	6,944	0.66
Imputed rental on holiday homes	0	895	0	895	895	1.00
Cultural, recreation, and gambling services	0	693	473	1,167	4,959	0.24
Retail sales - alcohol, food, and beverages	0	2,037	479	2,516	76,191	0.03
Retail sales - fuel and other automotive products	925	694	731	2,350	12,966	0.18
Retail sales – other	0	5,183	2,970	8,154	59,701	0.14
Education services	0	548	794	1,342	7,321	0.18
Other tourism products	348	1,436	1,661	3,445	57,390	0.06
Total tourism demand excluding GST	6,379	15,906	15,723	38,009		
GST paid on purchases by tourists	6	2,064	1,814	3,884		
Total tourism expenditure	6,386	17,970	17,537	41,892		

1. All product values are in producers' prices.

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

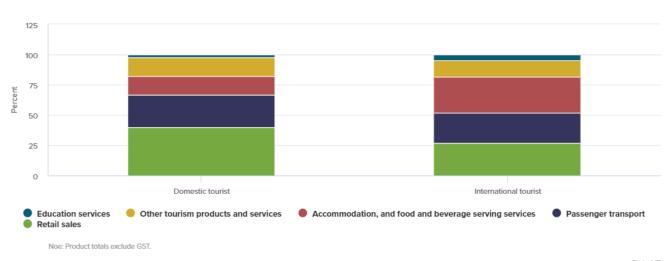
Note: Figures for years prior to 2020 have been revised.

Symbols:

P provisional

... not applicable

The biggest share of domestic demand was retail sales, at 39.7 percent, while international tourism's demand of retail represented only 26.6 percent of international spending. International tourists spent the remainder of their budget primarily on accommodation, and food and beverage serving services (29.7 percent), and passenger transport (25.1 percent) (see <u>figure 11</u>).



Share of tourism expenditure, by type of product and type of tourist, year ended March 2020

Figure 11

Stats NZ

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 2020, we derived an initial value of supply by product by industry for the same period from a variety of sources (covered in detail in <u>appendix 2: Methodology</u>). In <u>table 13</u>, supply by product is shown only for tourism-characteristic industries (see <u>appendix 1: Conceptual framework</u>).

Table 13 shows total supply and tourism supply by product for the years ended March 2017–2020.

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
 2020, for example, the tourism product ratio for accommodation services was 0.95. 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 2.4 percent in the March 2020 year. From 2017 to 2020, tourism supply increased at a slower rate than total supply (15.4 percent compared with 19.7 percent over this period).
- Imports sold directly to tourists represented 11.7 percent of total tourism supply in the March 2020 year, compared with 11.2 percent in the year ended March 2017.

Derivation of tourism supply from total supply,⁽¹⁾⁽²⁾ year ended March 2017-2020

		Total su	ipply				Tourism s	upply	
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)	
		2	017						
Accommodation services	2,470	554	0	3,024	0.96	2,361	530	0	2,891
Food and beverage serving services	8,855	1,005	0	9,860	0.43	3,796	414	0	4,209
Air passenger transport	5,037	61	0	5,099	0.99	4,982	61	0	5,043
Other passenger transport	5,501	366	0	5,867	0.69	3,826	242	0	4,068
Imputed rental on holiday homes	0	784	0	784	1.00	0	784	0	784
Cultural, recreation, and gambling services	4,183	215	0	4,398	0.23	943	68	0	1,011
Retail sales - alcohol, food, and beverages	1,662	53,875	6,054	61,591	0.04	269	1,652	346	2,267
Retail sales - fuel and other automotive products	3	7,007	2,846	9,856	0.19	1	1,372	526	1,898
Retail sales – other	267	29,497	22,386	52,149	0.13	52	4,139	2,827	7,018
Education services	18	6,156	0	6,174	0.14	3	874	0	876
Other tourism products	363	46,887	0	47,250	0.06	30	2,836	0	2,867
Total supply of products	28,359	146,407	31,286	206,052					
Total tourism supply of products						16,263	12,971	3,700	32,933
		2	018						
Accommodation services	2,728	585	0	3,313	0.95	2,600	557	0	3,158
Food and beverage serving services	9,464	1,151	0	10,615	0.43	4,117	479	0	4,596
Air passenger transport	5,180	64	0	5,245	0.99	5,146	64	0	5,210
Other passenger transport	5,853	428	0	6,281	0.69	4,049	283	0	4,332
Imputed rental on holiday homes	0	815	0	815	1.00	0	815	0	815
Cultural, recreation, and gambling services	4,233	213	0	4,446	0.24	1,018	68	0	1,085
Retail sales - alcohol, food, and beverages	1,763	59,596	6,807	68,165	0.04	312	1,773	367	2,452
Retail sales - fuel and other automotive products	3	7,775	3,357	11,135	0.19	1	1,457	605	2,062
Retail sales - other	278	31,205	23,874	55,357	0.14	64	4,544	3,040	7,648
Education services	17	6,349	0	6,366	0.16	3	992	0	995
Other tourism products	381	49,748	0	50,129	0.06	33	3,086	0	3,120
Total supply of products	29,900	157,929	34,038	221,867					
Total tourism supply of products						17,343	14,118	4,011	35,472
For footnotes, see end of table.									

Table continues next page

Table 13 continued

Derivation of tourism supply from total supply, (1)(2) year ended March 2017-2020

		Total su	ipply				Tourism s	upply	
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)	•	1		\$(millio	n)	•
		2	019		1				
Accommodation services	2,861	609	0	3,470	0.95	2,723	579	0	3,302
Food and beverage serving services	10,026	1,185	0	11,212	0.42	4,223	478	0	4,701
Air passenger transport	5,547	68	0	5,615	0.99	5,502	68	0	5,570
Other passenger transport	6,475	446	0	6,922	0.66	4,295	280	0	4,575
Imputed rental on holiday homes	0	847	0	847	1.00	0	847	0	847
Cultural, recreation, and gambling services	4,348	230	0	4,577	0.25	1,054	74	0	1,128
Retail sales – alcohol, food, and beverages	2,015	62,862	7,178	72,054	0.03	315	1,776	349	2,439
Retail sales - fuel and other automotive products	3	8,873	4,552	13,428	0.17	1	1,517	750	2,268
Retail sales – other	292	32,453	25,510	58,256	0.13	61	4,626	3,154	7,841
Education services	21	6,621	0	6,642	0.17	4	1,154	0	1,159
Other tourism products	419	53,224	0	53,642	0.06	37	3,232	0	3,269
Total supply of products	32,007	167,419	37,240	236,666					
Total tourism supply of products						18,215	14,632	4,253	37,100
		20	020P						
Accommodation services	2,816	666	0	3,482	0.95	2,687	635	0	3,323
Food and beverage serving services	10,115	1,265	0	11,380	0.43	4,323	516	0	4,838
Air passenger transport	5,344	71	0	5,415	0.99	5,313	71	0	5,384
Other passenger transport	6,497	447	0	6,944	0.66	4,311	285	0	4,596
Imputed rental on holiday homes	0	895	0	895	1.00	0	895	0	895
Cultural, recreation, and gambling services	4,694	265	0	4,959	0.24	1,092	75	0	1,167
Retail sales – alcohol, food, and beverages	2,070	66,775	7,346	76,191	0.03	329	1,827	360	2,516
Retail sales - fuel and other automotive products	3	8,304	4,659	12,966	0.18	1	1,526	824	2,350
Retail sales – other	304	33,288	26,109	59,701	0.14	73	4,807	3,274	8,154
Education services	21	7,300	0	7,321	0.18	6	1,336	0	1,342
Other tourism products	441	56,949	0	57,390	0.06	38	3,407	0	3,445
Total supply of products	32,305	176,226	38,114	246,644					
Total tourism supply of products						18,172	15,379	4,458	38,009

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 shown.

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

Note: Figures for years prior to 2020 have been revised.

Symbols:

P provisional

... not applicable

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 <u>table 14</u>. 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, see <u>table 14</u> for the years ended March 2017–2020.

Table 14

Direct tourism value added,⁽¹⁾ year ended March 2017–2020

	Year ended March									
	2017	2018	2019	2020P	2018	2019	2020P			
		\$(m	illion)		Annual p	percentag	e change			
Published GDP	271,422	291,264	306,721	323,142	7.3	5.3	5.4			
Less GST, import duties, and other taxes										
on production	23,482	24,687	25,835	27,312	5.1	4.7	5.7			
Gives contribution to GDP from production	247,940	266,577	280,886	295,831	7.5	5.4	5.3			
Tourism output of tourism-characteristic industries	16,263	17,343	18,215	18,172	6.6	5.0	-0.2			
Less tourism intermediate consumption of										
tourism-characteristic industries	8,895	9,572	10,170	10,125	7.6	6.2	-0.4			
Gives direct tourism value added										
of tourism-characteristic industries	7,368	7,772	8,045	8,047	5.5	3.5	0.0			
Plus direct tourism value added of all										
other industries	7,063	7,681	7,900	8,352	8.7	2.9	5.7			
Gives total direct tourism value added	14,430	15,452	15,945	16,400	7.1	3.2	2.9			
	Percent									
Direct tourism value added as a percentage of										
total industry contribution to GDP	5.8	5.8	5.7	5.5						

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

Note: Figures for all years prior to 2020 have been revised.

Symbols:

P provisional

... not applicable

Source: Stats NZ

Point to note from table 14:

• Between 2017 and 2020, direct tourism value added (also referred to as tourism's direct contribution to GDP) increased 13.7 percent, a slower rate than the contribution to GDP from domestic production, which increased 19.3 percent.

As shown in <u>figure 1</u>, total expenditure on goods and services by tourists (\$41.9 billion in 2020) consists of three components:

- Goods and services worth \$33.6 billion produced in New Zealand and directly purchased by tourists. Direct tourism output consisted of \$1.8 billion of intermediate inputs, and \$16.4 billion of direct tourism value added.
- Imports of \$4.5 billion sold directly to tourists by retailers.
- GST of \$3.9 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 <u>Quarterly gross domestic product: Sources and methods (fifth</u> <u>edition)</u> (Stats NZ, 2018).

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.

<u>Table 15</u> summarises the relationships between the various components of tourism expenditure. In the year ended March 2020, these imports increased 1.9 percent, and direct tourism value added increased 2.9 percent.

Tourism expenditure by component,⁽¹⁾ year ended March 2017–2020

		Year ended March										
	2017	2018	2018	2019	2020P							
		\$(m	illion)		Annual	e change						
Direct tourism value added	14,430	15,452	15,945	16,400	7.1	3.2	2.9					
Indirect tourism value added	10,030	10,729	11,084	11,349	7.0	3.3	2.4					
Imports sold to tourists ⁽²⁾	8,473	9,291	10,071	10,260	9.6	8.4	1.9					
GST paid on purchases by tourists	3,385	3,688	3,791	3,884	9.0	2.8	2.4					
Total tourism expenditure	36,318	39,161	40,891	41,892	7.8	4.4	2.4					

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

Imports used in production of goods and services sold to tourists; imports sold directly to tourists by retailers.
 Note: Figures for years prior to 2020 have been revised.

Symbol:

P provisional

Source: Stats NZ

Tourism expenditure can also be presented by the share of each component, as shown in <u>table 16</u> for the years ended March 2017–2020.

Table 16

Share of tourism expenditure by component,⁽¹⁾ year ended March 2017–2020

		Year end	led March						
	2017	2018	2019	2020P					
	Percent								
Direct tourism value added	39.7	39.5	39.0	39.1					
Indirect tourism value added	27.6	27.4	27.1	27.1					
Imports sold to tourists ⁽²⁾	23.3	23.7	24.6	24.5					
GST paid on purchases by tourists	9.3	9.4	9.3	9.3					
Total tourism expenditure	100.0	100.0	100.0	100.0					

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

Imports used in production of goods and services sold to tourists; imports sold directly to tourists by retailers.
 Note: Figures for years prior to 2020 have been revised.

Symbol:

P provisional

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. <u>Table 17</u> 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, year	enueu wa	arcii 2017-	2020				
			Year end	ed March			
	2017	2018	2019	2020P	2018	2019	2020P
		Num	ber		Annual p	ercentage	e change
Total employment							
Employees	2,169,981	2,241,669	2,293,716	2,344,329	3.3	2.3	2.2
Working proprietors	435,735	431,406	439,845	467,700	-1.0	2.0	6.3
Number of people employed	2,605,716	2,673,075	2,733,558	2,812,029	2.6	2.3	2.9
Tourism employment							
Tourism employees	182,451	194,613	193,269	196,692	6.7	-0.7	1.8
Tourism working proprietors	25,869	26,547	26,598	28,692	2.6	0.2	7.9
Number of people directly employed in tourism	208,323	221,157	219,867	225,384	6.2	-0.6	2.5
	Per	cent					
Number of people directly employed in tourism							
as a percentage of the total number of people							
employed	8.0	8.3	8.0	8.0			

Direct tourism employment, (1)(2)(3) year ended March 2017-2020

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 years prior to 2020 have been revised.

Symbols:

P provisional

... not applicable

Source: Stats NZ

Points to note from table 17:

- 225,384 people were directly employed in tourism in the year ended March 2020, an increase of 2.5 percent from the previous year.
- Direct tourism employment increased 8.2 percent between 2017 and 2020. The total number of people employed in New Zealand increased 7.9 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 2020, for example, direct tourism value added increased 2.9 percent, while the number of people employed directly in tourism increased 2.5 percent. This difference may be the result of several factors including:
 - a lag between growth in a given industry and decisions to employ new staff
 - 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.

<u>Table 18</u> and <u>figure 12</u> 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 2015–2019

		Y	ear ended March							
Industry	2015	2016	2017	2018	2019					
	Percent									
Tourism-characteristic industries										
Accommodation	22.7	23.2	24.4	23.6	24.9					
Food and beverage services	14.3	14.2	14.6	13.5	13.7					
Road, rail, and water transport ⁽³⁾	15.6	16.1	16.8	16.8	14.5					
Air and space transport	15.3	22.0	13.3	11.7	9.3					
Other transport, transport support, and travel and tour services	19.9	22.0	23.1	24.4	25.6					
Rental and hiring services	41.1	43.6	46.2	45.0	43.3					
Arts and recreation services	18.4	18.2	16.2	17.9	19.2					
Total tourism-characteristic industries	18.9	21.5	19.4	18.7	18.2					
Tourism-related industries										
Retail trade	22.3	22.2	24.6	23.8	24.1					
Education and training	16.7	16.9	16.6	16.8	17.2					
All non-tourism-related industries	26.5	27.4	26.2	26.6	25.8					
Total industry	21.4	23.2	21.9	21.5	21.0					

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

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

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

Note: Figures for all years prior to 2019 have been revised.

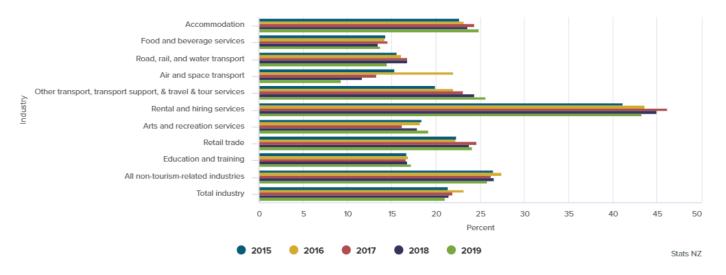
Source: Stats NZ

Points to note from table 18:

- The profitability of total tourism-characteristic industries for the year ended March 2019 decreased 0.5 percentage points compared with the year ended March 2018.
- The biggest fall in profitability ratio from 2018 was for 'air and space transport' (2.4 percentage points).
- The biggest increase in profitability ratios in the year ended March 2019 compared with the year ended March 2015 was in 'other transport, transport support, and travel and tour services' (5.7 percentage points) compared with the biggest decrease in 'air and space transport' (6.0 percentage points).

Figure 12

Tourism gross operating surplus and gross mixed income (\$) as a percentage of total tourism output, year ended March 2015–2019



43

Detailed product and industry tables, year ended March 2019

Tables 19–26 in this section (also available for download from www.stats.govt.nz) provide details of the tourism satellite account for the year ended March 2019, the latest year for which balanced supply and use tables are available.

See:

19 Tourism expenditure, by type of product and type of tourist, year ended March 2019

20 New Zealand System of National Accounts production accounts, by industry, year ended March 2019

21 Sales by type of product and industry, year ended March 2019

22 Derivation of tourism product ratios, year ended March 2019

23 Derivation of tourism industry ratios, year ended March 2019

24 Derivation of direct tourism value added, year ended March 2019

25 Direct tourism employment, by industry, year ended March 2019

26 Gross fixed capital formation and net capital stock, by industry, year ended March 2019

Detailed product and industry tables for the year ended March 2020 will be available in *Tourism* satellite account: Year ended March 2021, to be published in December 2021 on www.stats.govt.nz.

Tourism expenditure, by type of product and type of tourist,⁽¹⁾⁽²⁾ year ended March 2019

		Domestic deman	d		
Product	Business demand	Government demand	Household demand	International demand	Total demand
			\$(million)		
Tourism-characteristic products	•				
Accommodation services	459	189	784	1,871	3,302
Food and beverage serving services	325	113	1,571	2,692	4,701
Road, rail, and water passenger transport ⁽³⁾	216	59	442	545	1,263
Air passenger transport	1,260	584	1,067	2,659	5,570
Travel agency services	432	240	484	411	1,567
Motor vehicle hire or rental	693	274	459	321	1,746
Imputed rental on holiday homes	0	0	847	0	847
Libraries, archives, museums, and other					
cultural services	0	0	127	119	246
Other sport and recreation services	0	0	315	241	556
Total tourism-characteristic products	3,385	1,459	6,097	8,858	19,798
Tourism-related products					
Retail sales - alcohol	0	0	690	105	796
Retail sales - clothing and footwear	0	0	1,241	679	1,920
Retail sales - food, beverages, tobacco, and					
other groceries	0	0	1,280	364	1,644
Retail sales - fuel and other automotive					
products	592	294	664	719	2,268
Retail sales - retail medicines, toiletries	0	0	534	133	666
Retail sales - tourism consumer durables	0	0	1,563	277	1,840
Retail sales – other shopping	0	0	1,590	1,825	3,415
Financial services	24	3	1	5	34
General insurance (incl travel insurance)	69	8	87	82	246
Social and health-related services	0	0	718	98	816
Gambling services	0	0	236	90	326
Education services	0	0	431	728	1,159
Other tourism-related services	173	55	357	1,404	1,988
Other personal services	0	0	161	24	185
Total tourism-related products	858	360	9,552	6,533	17,302
Total tourism demand excluding GST	4,242	1,818	15,648	15,391	37,100
GST paid on purchases by tourists	6	1	2,010	1,775	3,791
Total tourism expenditure	4,248	1,819	17,658	17,166	40,891

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.

New Zealand System of National Accounts production accounts, by industry,⁽¹⁾⁽²⁾ year ended March 2019

			Tourism-c	haracteris	tic industrie	s			m-related ustries	All non-	
	Accom- modation	Food and beverage services	Road, rail, and water transport (3)	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
						\$(million)					
Published GDP											306,721
Less GST, import duties,											
and other taxes on											
production											25,835
Contribution to GDP from											
production	2,070	4,766	4,850	1,989	5,560	2,964	3,992	13,781	13,068	227,845	280,886
Equivalent to total output	4,095	10,498	11,481	6,499	8,185	5,071	7,735	22,320	18,001	495,969	589,855
Less intermediate consumption	2,025	5,732	6,631	4,510	2,625	2,107	3,743	8,539	4,932	268,124	308,969
Components of GDP											
Compensation of employees	1,003	3,276	2,769	1,365	2,147	721	1,888	8,254	10,597	98,332	130,353
Gross operating surplus and											
gross mixed income	1,021	1,441	1,621	605	3,315	2,196	1,463	5,409	2,382	116,983	136,437
Taxes on production and imports	48	56	898	19	99	47	666	128	97	13,078	15,135
Less subsidies	1	7	437	-	1	1	26	10	7	548	1,039

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

2. All values are in producers' prices.

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

Symbol:

... not applicable

Sales by type of product and industry,⁽¹⁾⁽²⁾ year ended March 2019

Sales by type of product and in					tic industrie			Tourism	-related			
			anan-en	anaotonia				indus	tries			
		Food	D I		Other	P	Arts			All non-		
	A	and	Road, rail, and	Air and	transport,	Rental	and		Educat	tourism-	launa da	Total
Product	Accom- mod-	beve-	water	space	transport support,	and hiring	recreat-	Retail	Educat- ion and	related indust-	Imports	industry
	ation	rage	trans-	trans-	and travel	serv-	ion	trade	training			(supply)
	auon	serv-	port ⁽³⁾	port	and tour	ices	serv-		uanniy	ries		
		ices	pon	pon	services	1003	ices					
					00111000	\$(r	nillion)					
Sales of tourism-characteristic												
products												
Accommodation services	2,282	458	0	0	2	0	118	0	464	145	0	3,470
Food and beverage serving services	1,281	8,167	21	0	85	1	472	358	212	615	0	11,212
Road, rail, and water passenger transport ⁽⁴⁾	36	0	2,013	0	375	2	5	1	42	31	0	2,505
Air passenger transport	0	0	0	5,546	1	0	0	1	63	5	0	5,615
Travel agency services	14	0	2	37	1,459	4	16	0	3	45	0	1,579
Motor vehicle hire or rental	0	0	20	138	9	2,346	0	15	0	309	0	2,838
Imputed rental on holiday homes	0	0	0	0	0	0	0	0	0	847	0	847
Libraries, archives, museums, and other												
cultural services	0	0	0	0	0	0	477	0	41	24	0	541
Other sport and recreation services	41	0	0	0	24	69	1,636	0	44	104	0	1,918
Total tourism-characteristic products	3,653	8,625	2,056	5,721	1,956	2,421	2,723	375	868	2,125	0	30,525
Sales of tourism-related products												
Retail sales - alcohol	338	961	0	0	0	0	1	262	0	5,210	690	7,461
Retail sales - clothing and footwear	0	0	0	0	0	0	0	2,137	10	1,114	3,205	6,466
Retail sales - food, beverages, tobacco,												
and other groceries	29	683	0	0	3	0	0	5,149	1	52,240	6,488	64,593
Retail sales - fuel and other automotive												
products	0	0	3	0	0	0	0	888	0	7,986	4,552	13,428
Retail sales - retail medicines, toiletries	0	6	0	0	0	0	0	1,189	0	2,939	2,761	6,896
Retail sales - tourism consumer durables	0	0	2	0	0	0	0	3,669	1	6,849	11,250	21,772
Retail sales - other shopping	0	0	1	0	2	253	28	5,817	80	8,650	8,293	23,122
Financial services	0	0	0	0	0	0	0	3	1	3,852	0	3,856
General insurance (incl travel insurance)	0	0	0	0	0	0	0	0	0	6,110	0	6,110
Social and health-related services	0	0	0	0	0	0	8	0	4	12,231	0	12,242
Gambling services	0	12	0	0	0	0	2.089	1	0	17	0	2,118
Education services	0	0	1	13	-	0		0	5,797	824	0	6.642
Other tourism-related services	ő	4	. 76		-	20	-	576	21	28,240	ő	29,236
Other personal services	0	0	0	0		12		0	0	2,186	0	2,199
Total tourism-related products	367	1,666	83	21	297	285	2,131	19.690	5,914		37,240	206,141
Sales of all domestically produced		.,					-,	,,	-,			
non-tourism-related products	74	207	9,348	756	5,935	2,347	2.872	2,255	11.165	355,092	-	390,052
Total sales	4.095	10,498	11.488	6,499	-,	5,054	1 A A	22,320	17,946	495,664	37,240	626,718
Other output items	-,		-7	-,	-3	18	· · · ·	,••	54	306	-	377
Less imports of tourism-related products ⁽⁵⁾	_	_	-1		~			_		000	37.240	37,240
	4,095	10,498	11,481	6,499	8,185	5,071	7,735	22,320	18,001	495,969	01,240	589,855
Total industry output		10,430	11,401	0,433	0,105	3,071	1,135	22,520	10,001	400,000	-	303,030

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

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.

Symbol:

... not applicable

Derivation of tourism product ratios,⁽¹⁾⁽²⁾ year ended March 2019

Product	Total demand (from table 19)	Total supply (from table 21)	Tourism product ratio ⁽³⁾
	\$(mil	lion)	
Tourism-characteristic products			
Accommodation services	3,302	3,470	0.95
Food and beverage serving services	4,701	11,212	0.42
Road, rail, and water passenger transport ⁽⁴⁾	1,263	2,505	0.50
Air passenger transport	5,570	5,615	0.99
Travel agency services	1,567	1,579	0.99
Motor vehicle hire or rental	1,746	2,838	0.62
Imputed rental on holiday homes	847	847	1.00
Libraries, archives, museums, and other cultural			
services	246	541	0.45
Other sport and recreation services	556	1,918	0.29
Total tourism-characteristic products	19,798	30,525	
Tourism-related products			
Retail sales - alcohol	796	7,461	0.11
Retail sales - clothing and footwear	1,920	6,466	0.30
Retail sales - food, beverages, tobacco, and other			
groceries	1,644	64,593	0.03
Retail sales - fuel and other automotive products	2,268	13,428	0.17
Retail sales - retail medicines, toiletries	666	6,896	0.10
Retail sales - tourism consumer durables	1,840	21,772	0.08
Retail sales - other shopping	3,415	23,122	0.15
Financial services	34	3,856	0.01
General insurance (incl travel insurance)	246	6,110	0.04
Social and health-related services	816	12,242	0.07
Gambling services	326	2,118	0.15
Education services	1,159	6,642	0.17
Other tourism-related services	1,988	29,236	0.07
Other personal services	185	2,199	0.08
Total tourism-related products	17,302	206,141	
Total tourism demand excluding GST	37,100	236,666	
GST paid on purchases by tourists	3,791		
Total tourism expenditure	40,891		

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

2. All values are in producers' prices.

Tourism product ratios shown 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.

Symbol:

... not applicable

Derivation of tourism industry ratios,⁽¹⁾⁽²⁾ year ended March 2019

	14100,							Tourism	n-related	All non-	
		Tou	rism-char	acterist	ic industries	6		indus	stries	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	2,172	436	0	0	2		112	0	442		3,302
Food and beverage serving services	548	3,414	9	0	38	0	213	136	91	251	4,701
Road, rail, and water passenger transport ⁽⁵⁾	16	0	939	0	271	1	3	0	19	14	1,263
Air passenger transport	0	0	0	5,502		0	0	1	62	5	5,570
Travel agency services	14	0	2	37	1,448	4	16	0	3	44	1,567
Motor vehicle hire or rental	0	0	12	85	6	1,443	0	9	0	190	1,746
Imputed rental on holiday homes	0	0	0	0	0	0	0	0	0	847	847
Libraries, archives, museums, and other											
cultural services	0	0	0	0	0	0	217	0	18	11	246
Other sport and recreation services	13	0	0	0	7	20	474	0	12	31	556
Total tourism-characteristic products											
purchased by tourists	2,761	3,851	962	5,624	1,773	1,469	1,035	147	648	1,531	19,798
Tourism-related products											
Retail sales - alcohol	59	166	0	0	0	0	0	62	0	509	796
Retail sales - clothing and footwear	0	0	0	0	0	0	0	744	2	1,174	1,920
Retail sales - food, beverages, tobacco,											
and other groceries	7	83	0	0	0	0	0	267	0	1,287	1,644
Retail sales - fuel and other automotive											
products	0	0	1	0	0	0	0	209	0	2,058	2,268
Retail sales - retail medicines, toiletries	0	1	0	0	0	0	0	269	0	396	666
Retail sales - tourism consumer durables	0	0	0	0	0	0	0	357	0	1,483	1,840
Retail sales - other shopping	0	0	0	0	0	35	24	992	39	2,324	3,415
Financial services	0	0	0	0	0	0	0	0	0	34	34
General insurance (incl travel insurance)	0	0	0	0	0	0	0	0	0	245	246
Social and health-related services	0	0	0	0	0	0	1	0	0	815	816
Gambling services	0	1	0	0	0	0	322	0	0	2	326
Education services	0	0	0	2	2	0	0	0	878	277	1,159
Other tourism-related services	0	0	7	1	25	1	1	89	6	1,859	1,988
Other personal services	0	0	0	0	0	1	0	0	0	184	185
Total tourism-related products											
purchased by tourists	66	252	8	3	27	37	348	2,989	925	12,647	17,302
Direct tourism sales	2,827	4,102	970	5,626	1,800	1,506	1,383	3,135	1,573	14,177	37,100
Total industry output	4,095	10,498	11,481	6,499	8,185	5,071	7,735	22,320	18,001	495,969	589,855
Tourism industry ratio	0.69	0.39	0.08	0.87	0.22	0.30	0.18	0.14	0.09	0.02	
A ladi idual Gaussa may ask sum to stated to											

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

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.

Symbol:

... not applicable

Derivation of direct tourism value added,⁽¹⁾⁽²⁾ year ended March 2019

			urism-ch		stic industri				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	Educat- ion and training	All non- tourism- related industries	Total industry
			\$	(millior	1)						
Tourism industry ratio	0.69	0.39	0.08	0.87	0.22	0.30	0.18	0.14	0.09	0.02	
Direct tourism value added	1,429	1,862	404	1,722	1,028	880	720	1,895	1,074	4,931	15,945
Equivalent to tourism output	2,827	4,102	970	5,626	1,800	1,506	1,383	3,135	1,573	9,924	32,847
Less tourism intermediate consumption	1,398	2,240	567	3,905	772	626	662	1,241	499	4,994	16,903
Contribution to GDP from production											280,886
			1	Percen	t						
Direct tourism value added as a percentage of total industry contribution to GDP											5.7
			\$	(millior	1)						
Components of direct tourism value added											
Tourism compensation of employees	692	1,280	229	1,182	550	214	328	1,123	794	1,762	8,155
Tourism gross operating surplus and											
gross mixed income	705	563	141	524	460	652	266	756	271	2,557	6,894
Tourism taxes on production and imports	33	22	66	16	18	14	130	17	10	622	948
Less tourism subsidies	1	3	31	-	-	-	4	1	1	10	53

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

2. All values are in producers' prices.

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

Symbol:

... not applicable

Direct tourism employment, by industry,⁽¹⁾⁽²⁾ year ended March 2019

	Tourism-characteristic industries							Tourism-related industries			
	Accom- moda- tion	Food and beverage services	Road, rail, and water trans- port ⁽³⁾	Air and space trans- port	Other trans- port, 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
				Numb	er				I		
Total employment											
Employees	37,596	144,141	43,587	12,102	30,690	12,696	41,124	220,614	195,762	1,555,401	2,293,716
Working proprietors	4,068	15,033	9,108	231	4,023	2,409	9,066	24,657	8,487	362,760	439,845
Number of people employed	41,664	159,174	52,695	12,333	34,716	15,105	50,193	245,271	204,249	1,918,164	2,733,558
Tourism industry ratio ⁽⁴⁾	0.69	0.39	0.08	0.87	0.22	0.30	0.18	0.14	0.09	0.02	
Tourism employment											
Tourism employees	25,953	56,328	3,552	10,476	10,173	3,771	7,128	29,907	14,331	31,647	193,269
Tourism working proprietors	2,805	5,877	678	201	2,499	717	1,470	3,573	1,539	7,245	26,598
Number of people directly employed											
in tourism	28,761	62,202	4,230	10,677	12,669	4,488	8,598	33,480	15,870	38,895	219,867
				Percer	nt						
Number of people directly employed											
in tourism as a percentage of the											
total number of people employed ⁽⁶⁾											8.0
				\$(millio	on)						
Total employment earnings [®]											
Employees	1,033	3,297	2,523	С	1,842		1,741	7,790	10,101	С	119,791
Working proprietors	208	674	411	С	261	156	369	1,396	349	С	29,403
Total earnings	1,241	3,971	2,934	С	2,103	746	2,109	9,187	10,450	С	149,194

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.

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

Gross fixed capital formation and net capital stock, by industry, ⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾ year ended March 2019

	Tourism-characteristic 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	Total tourism- character- istic industries	All other industries (6)	Total industry
	\$(million)									
			Gross fixe	d capital f	ormation					
Asset type										
Residential buildings	0	0	0	0	0	0	1	1	22,568	22,569
Non-residential buildings	405	141	-14	25	310	586	479	1,933	6,977	8,910
Other construction	3	4	41	0	3,426	-5	141	3,610	5,694	9,304
Land improvement ⁽⁷⁾	3	1	0	0	1	3	34	42	767	808
Transport equipment	20	45	897	139	201	1,544	43	2,889	3,329	6,217
Plant, machinery, and equipment	145	211	90	256	781	651	329	2,463	12,075	14,539
Intangible assets	19	35	46	19	89	39	92	339	10,054	10,392
Total gross fixed										
capital formation	594	438	1,060	438	4,810	2,818	1,119	11,276	61,463	72,739
			Net	capital sto	ock					
Total net capital stock	6,119	4,278	9,132	3,835	67,794	11,177	12,748	115,082	791,623	906,706

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

ANZSICO6: 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: Year ended March 2020 is based on the methodology produced by the United Nations World Tourism Organization (UNWTO) in its publication *Tourism satellite account: Recommended methodological framework 2008* (UNWTO, 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 <u>System of national accounts 2008</u>.

Definitions used in *Tourism satellite account: Year ended March 2020* 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 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 who purchase 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 (for example, meals or souvenirs), or is travel related (for example, 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 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.

<u>Table 27</u>, appendix 3: Tourism product classification, has a full list of tourism-characteristic and tourism-related products.

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>).

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 tourism-characteristic 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 (that is, 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 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.

Reference for appendix

United Nations Statistics Division, Statistical Office of the European Communities, Organisation for Economic Co-operation and Development, World Tourism Organization (2008). <u>Tourism satellite</u> <u>account: Recommended methodological framework</u>. Available from www.oedc.org.

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

<u>Table 12</u> 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 expenditure from international visitors and international students.

Final accounts

Expenditure by international tourists in New Zealand is derived from the <u>International Visitor Survey</u> (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. 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).

Cruise ship expenditure by international visitors

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 several 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 2015–2020 only. Data before 2015 is not available due to the limitations of some key data inputs. No modelling is undertaken to determine estimates before 2015.

Tourism expenditure by international students

International students are defined as those studying in New Zealand for less than 12 months. *Tourism satellite account: Year ended March 2020* incorporates historic changes to export education data used to derive international student expenditure. This includes changes to student numbers from 2016.

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: Year ended March 2020 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 2009–2020. Before 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: Year ended March 2015*. We have made additional refinements to these estimates for *Tourism satellite account: Year ended March 2020*. 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 2020 is weighted according to the 2019 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, for example, 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, for example, 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 2009–2020. At the time of compilation, AES data was available to the 2019 financial year. To produce the HTEE through to 2020, Marketview estimated the value of each industry in the 2020 provisional year by applying movements for each industry from additional Stats NZ data sources, including GST data, to the 2019 AES data.

For example, Marketview took annual movements in spending for ANZSICO6 industry G4110 from the Retail Trade Survey. They applied this to the 2019 AES data to determine a 2020 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</u> tourism expenditure and tourism production).

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 <u>Tourism expenditure</u> in appendix 1: Conceptual framework. Read more about consumer durables in the TSA in the <u>Special treatments</u> 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</u> expenditure and tourism production).

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 below, <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. Note 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 <u>table 17</u>) 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: Year ended March 2020*, 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 <u>employment source data</u> 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: Year ended March 2020*. 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: Year ended March 2020*.

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

Table 7 presents the number of people employed indirectly in tourism.

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 nonfinancial 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 (for example, 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 above in <u>Production of tourism goods and</u> <u>services</u>)
- 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 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 (ANZSIC06) measure, which allocates a person to the industry where they have generated the most earnings from in the tax year.

Linked employer-employee data (LEED) has more information about LEED employment.

Employment and tourism employment estimates for 2020

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 2019 at the time of publication, *Tourism satellite account: Year ended March 2020* provides aggregated total estimates for the year 2020. 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 2020 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 2019 employee industry data.
- Working proprietor estimates for 2020 are derived by applying the year ended March (quarterly mean) annual Household Labour Force Survey (HLFS) industry movements to 2019 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.

 Kristy holds three part-time jobs in Queenstown – at a tourist attraction, in a restaurant, and at an accommodation provider. During the year Kristy'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
- \circ number of filled jobs = 3.
- 2. Tiffany holds a full-time job in summer in Ohakune working at an outdoor equipment retail store. In winter, she works full time at the cafés on the ski field. Over the year Tiffany generated more earnings from the retail store than her café work, therefore she would be assigned to the retail trade industry.

Under the LEED-based measures this equates to:

- number of people employed = 1
- \circ 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 have their own separate ID numbers. 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:

- number of people employed = 1
- \circ number of filled jobs = 2.
- 4. Taylor and Bernie live together in Wellington on the understanding that Taylor is the breadwinner and Bernie is the homemaker. Taylor operates her own small business selling music souvenirs to tourists during the week, while on the weekends she works for the local holiday park. Bernie helps at the holiday park in the month of February his only employment for the year. Taylor's highest earnings were generated from her retail business, therefore she would be allocated to the retail trade industry. Bernie's employment would be allocated to the accommodation industry.

Under the LEED-based measures this equates to:

- number of people employed = 2 (1 Taylor and 1 Bernie)
- number of filled jobs = 3 (2 Taylor and 1 Bernie).

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 <u>Appendix 3: Tourism</u> <u>product classification</u> 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 2 references

Inter-Secretariat Working Group on National Accounts (2008). <u>System of national accounts 2008</u>. Available from http://unstats.un.org.

United Nations Statistics Division, Statistical Office of the European Communities, Organisation for Economic Co-operation and Development, World Tourism Organization (2008). <u>Tourism satellite</u> <u>account: Recommended methodological framework</u>. Available from www.oedc.org

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.

Та	bl	е	27

Tourism product class	ification		
Tourism product for provisional tourism satellite accounts	Tourism product for tourism satellite accounts	Includes	Excludes
Accommodation services	Accommodation services	Hotel and other lodging services	Accommodation for the elderly and students' accommodation (for example, student hostels)
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 sea- going 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

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 27 continued

Table continues next page

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	•	·	·	

Table 27 continued

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, see table 28.

Table 2	8
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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-	Tourism-	Accommodation	H44	Accommodation
characteristic industries	characteristic 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,	150	Other transport
		transport support, and travel and tour services	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 services	R89	Heritage activities
			R90	Creative and performing arts activities
			R91	Sports and recreation activities
			R92	Gambling activities

Table continues next page

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 – Source: Stats NZ	2006 Australian and	New Zealand Standard	d Industrial Classifi	cation

Table 28 continued