

# **1. Taiwan Tourism Satellite Account**

## **(1) Introduction**

In 2001, the ROC Tourism Bureau (TB) undertook the development of a framework of Taiwan Tourism Satellite Account, referred to as TTSA2001, the first version of Taiwan Tourism Satellite Accounts Framework. TTSA2001 has been established in accordance with the recommended methodological framework of the United Nations World Tourism Organization and other international organizations, which is known as TSA: RMF 2001.

Having reviewed Taiwan's tourism-related statistics and taken into consideration the data requirements to complete the ten tables suggested in TSA: RMF 2001, the TB has established a set of six tables in TTSA2001. The six tables are tourism expenditure table, tourism products supply table, tourism ratio of tourism products table, tourism ratio of tourism industries table, tourism gross domestic product table, and employment in tourism industries table. Based on the TTSA2001 framework, Taiwan TSAs were compiled for the years between 1999 and 2012.

In 2008, the Tourism Satellite Account: Recommended Methodological Framework, known as TSA: RMF 2008, was published. It served as an international standard by providing the common conceptual framework for constructing a TSA. The TB reviewed the concepts, definitions and tables recommended in TSA: RMF 2008, and upgraded the first TSA framework into the second version of Taiwan Tourism Satellite Account Framework, called TTSA2016.

In order to achieve a uniform basis for comparison with other countries, TTSA2016 follows the recommendation of TSA: RMF 2008, and defines the tourism as "the activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of activity remunerated from within the place visited."

When attempting to define "usual environment", many countries use "distance" as the criterion. Due to Taiwan's small size, a large proportion of tourism activities would be excluded if "distance" was used as the defining criterion. Therefore, whether an activity is outside of one's usual environment is determined in a subjective manner, i.e., the visitor decides if his or her activities are conducted outside the usual environment.

TTSA2016 considers three types of visitors in TTSA. These include inbound visitors, domestic visitors, and outbound visitors. The domestic visitors are further divided into same-day visitors and overnight visitors.

Tourism expenditure is one of the most important statistics in TSA. The TB adopted its definition given by TSA: RMF 2008, “tourism expenditure is the amount paid for the acquisition of consumption goods and services, as well as valuables, for own use or to give away, for and during tourism trips. It includes expenditure by visitors themselves as well as expenses that are paid for reimbursed by others.”

According to the types of visitors defined in TTSA2016, three forms of tourism expenditure are compiled in TTSA, namely inbound tourism expenditure, domestic tourism expenditure, and internal tourism expenditure. Inbound tourism expenditure refers to tourism related expenditure made by inbound visitors within Taiwan and expenditure on international flights provided by Taiwan airlines. Domestic tourism expenditure includes (1) the tourism related expenditure made by Taiwan residents traveling within Taiwan, and (2) tourism products of Taiwan providers purchased by outbound visitors before and after their trips abroad. Internal tourism expenditure refers to tourism related expenditure of resident visitors and inbound visitors within Taiwan, and it is the sum of domestic tourism expenditure and inbound tourism expenditure.

Value added and employment opportunities are the key contributions that tourism makes to an economy. These aggregates represent a set of relevant indicators of the size of tourism in an economy from the supply side. Thus, we included table T7 and table T8 to estimate the contributions of Taiwan tourism activities.

## **(2) Tourism Products and Tourism Industries in TTSA2016**

We followed the recommendation of TSA: RMF 2008, and classified tourism products as tourism characteristic products and other tourism products in TTSA2016. We further adopted the ROC Standard Industrial Classification (the 10<sup>th</sup> revised edition), and categorized the tourism industries as tourism characteristic industries and other tourism industries. The lists of tourism products and tourism industries included in TTSA2016 are shown in Table 1.

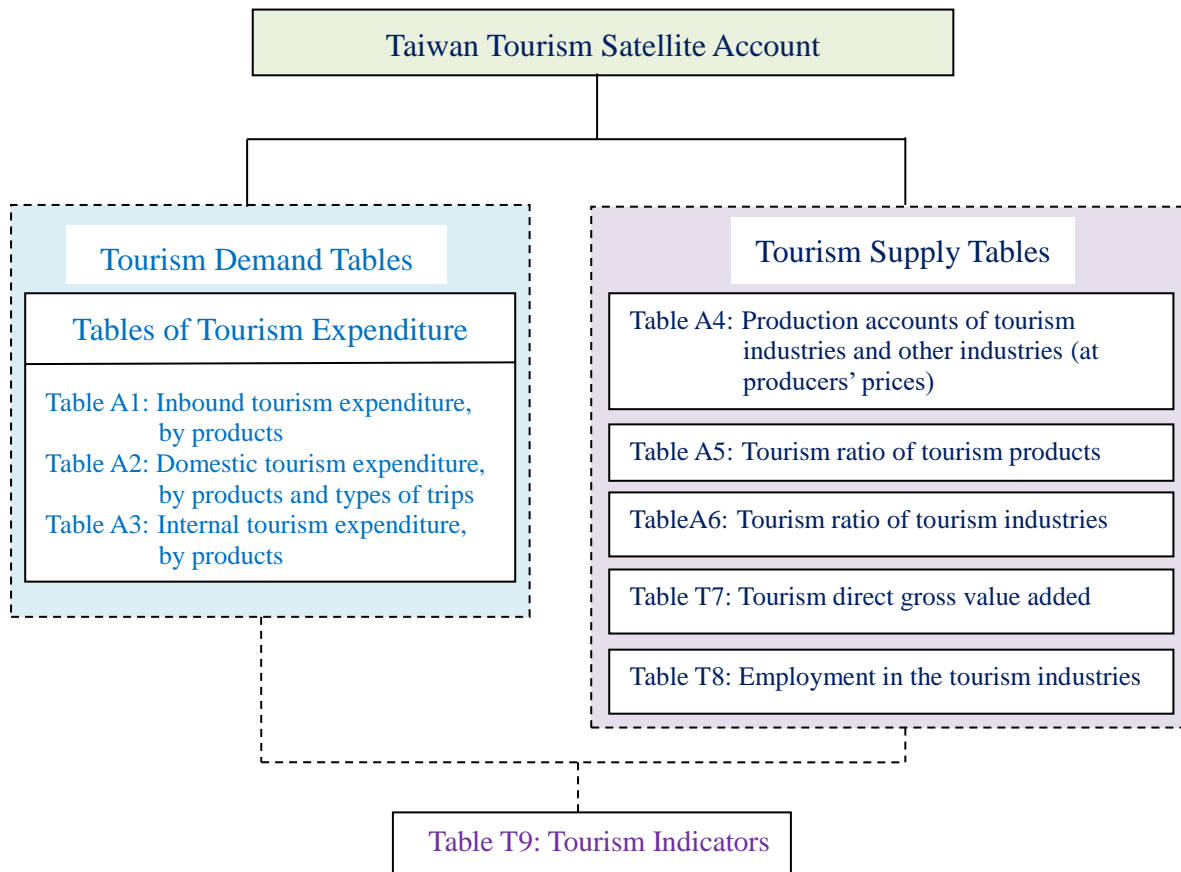
**Table 1 Tourism Products and Tourism Industries in TTSA2016**

Tourism products	Tourism industries/activities
Tourism characteristic products	Tourism characteristic industries
1. Accommodation services	1. Accommodation
2. Food and beverage serving services	2. Food and beverage serving (F & B serving)
3. Passenger transport services	3. Passenger transport
3.1 Land passenger services	3.1 Land transport
3.2 Air passenger services	3.2 Air transport
3.3 Water passenger services	3.3 water transport
4. Motor vehicle rental services	4. Motor vehicle rental
5. Travel agencies and other reservation services	5. Travel agencies and other reservation
6. Art, recreation and leisure services	6. Art, recreation and leisure industry
7. Shopping services (incl. gasoline retail)	7. Retail trade
Other tourism products	Other tourism industries

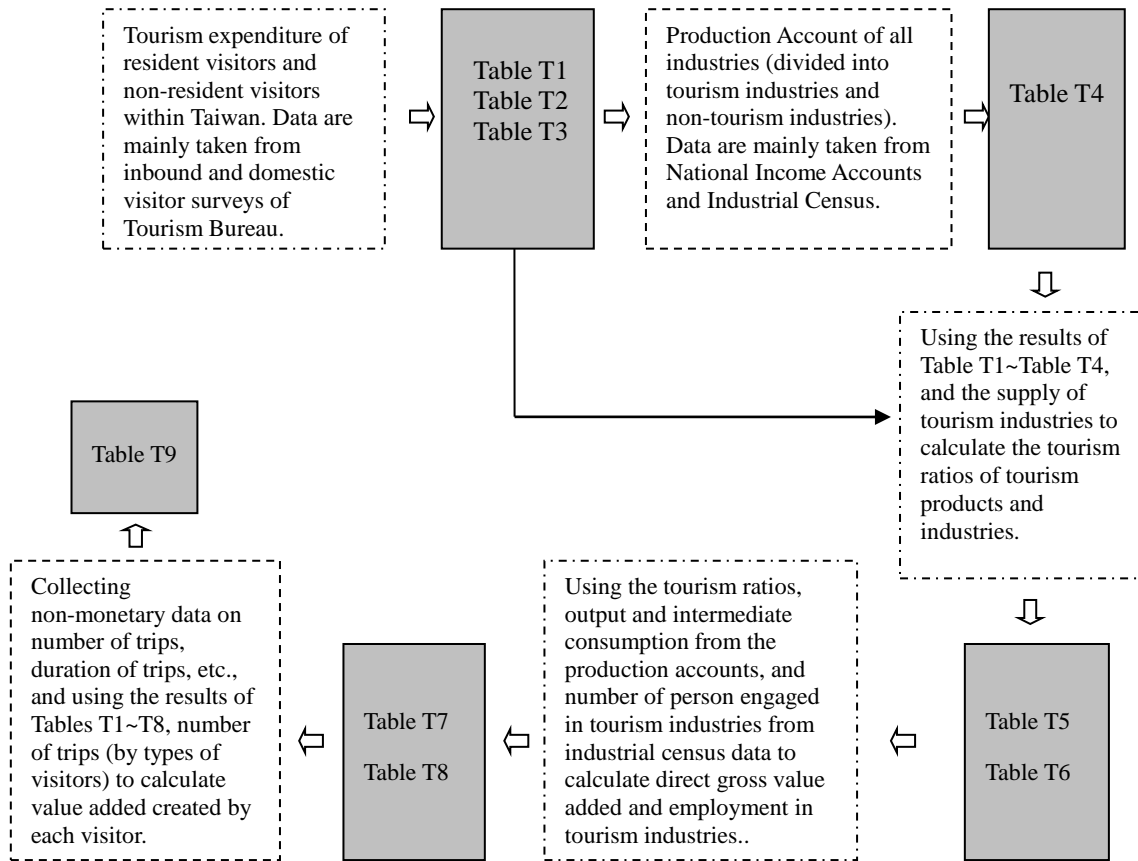
### **(3) Taiwan Tourism Satellite Account Tables**

The main purpose of the TSA is to provide a system of statistics consistent with the national accounts, so that the economic importance of the tourism activities can be identified and recognized. Compilation of the TSA data can provide important tourism information, such as the supply of tourism products, the demand for tourism products, investment and employment in the tourism industries, tourism direct gross value added generated by tourism industries, etc. This information is crucial to government policy analysis, market research, tourism industries performance evaluation and tourism forecasts.

Although TSA: RMF 2008 recommended a total of 10 tables for a TSA, after reviewing data availability related to Taiwan tourism, we included 9 tables in TTSA2016, as shown in Figure 1. It is worth to mention that table T9 not only is showing the non-monetary information such as accommodation capacity and number of visitors, but also the direct gross value added generated by each different type of visitors. The 9 tables are compiled in the sequence shown in Figure 2.



**Figure 1 Tables in TTSA2016**



**Figure 2 Compilation Sequence of TTSA**

## 2. Results of Taiwan Tourism Satellite Accounts 2009-2021

### (1) Results of Taiwan Tourism Satellite Account 2021

**Table T1 Inbound tourism expenditure, by products 2021**

Tourism products	Inbound tourism expenditure	
	amount ( million NT\$ )	Percentage (%)
Total	17,522	100.00
Tourism characteristic products	155,81	88.92
Accommodation services	4,182	23.87
Food & beverage serving services	5,069	28.93
Passenger transport services	4,175	23.83
Land passenger services	981	5.60
Air passenger services	3,195	18.23
Water passenger services	-	-
Motor vehicle services	13	0.07
Travel agencies and other reservation services	14	0.08
Art, recreation and leisure services	267	1.52
Shopping services	1,861	10.62
Other tourism products	1,941	11.08

Exchange rate = 28.022( NT\$/US\$)

**Table T2 Domestic tourism expenditure, by products and types of trips 2021**

Units: million NT\$, %

Tourism products	Domestic tourism expenditure					
	Domestic tourism trips			Outbound tourism trips	Total	percentage
	Same-day visitors	Overnight visitors	Sub-total			
Total	103,233	195,336	298,569	21,291	319,860	100.00
Tourism characteristic products	98,884	190,697	289,581	21,071	310,652	97.12
Accommodation services	0	50,631	50,631	11,783	62,413	19.51
F & B serving services	34,234	39,006	73,240	--	73,240	22.90
Passenger transport services	6,817	16,700	23,517	7,447	30,964	9.68
Land passenger services	6,555	11,318	17,873	189	18,062	5.65
Air passenger services	135	3,458	3,593	7,258	10,851	3.39
Water passenger services	127	1,924	2,050	--	2,050	0.64
Motor vehicle rental services	5,793	26,539	32,332	--	32,332	10.11
Travel agencies & other reservation services	429	13,111	13,540	421	13961	4.36
Art, recreation and leisure services	5,835	6,389	12,224	--	12,224	3.82
Shopping services	31,171	26,489	57,660	1,421	59,081	18.47
Gasoline retail services	14,606	11,832	26,438	--	26,438	8.27
Other tourism products	4,349	4,639	8,988	220	9,208	2.88

-: not applied.

Exchange rate =28.022 (NT\$/US\$)

**Table T3 Internal Tourism Expenditure, by products 2021**

Units: million NT\$, %

Tourism products	Internal tourism expenditure						Total	percentage
	Inbound tourism expenditure	Domestic tourism expenditure				Sub-total		
		Domestic tourism trips		Outbound tourism trips				
		Same-day visitors	Overnight visitors					
Total	17,522	103,233	195,336	21,291	319,860	337,382	100.00	
Tourism characteristic products	15,581	98,884	190,697	21,071	310,652	326,233	96.70	
Accommodation services	4,182	0	50,631	11,783	62,413	66,595	19.74	
Food & beverage serving services	5,069	34,234	39,006	--	73,240	78,309	23.21	
Passenger transport services	4,175	6,817	16,700	7,447	30,964	35,140	10.42	
Land passenger services	981	6,555	11,318	189	18,062	19,043	5.64	
Air passenger services	3,195	135	3,458	7,258	10,851	14,046	4.16	
Water passenger services	--	127	1,924	--	2,050	2,050	0.61	
Motor vehicle rental services	13	5,793	26,539	--	32,332	32,345	9.59	
Travel agencies & other reservation services	14	429	13,111	421	13,961	13,975	4.14	
Art, recreation and leisure services	267	5,835	6,389	--	12,224	12,491	3.70	
Shopping services	1,861	31,171	26,489	1,421	59,081	60,941	18.06	
Gasoline retail services	--	14,606	11,832	--	26,438	26,438	7.84	
Other tourism products	1,941	4,349	4,639	220	9,208	11,149	3.30	

-: not applied.

Exchange rate =28.022(NT\$/US\$)

**Table T4 Production accounts of tourism industries and other industries (at producers' prices) 2021**

Unit: million NT\$

industries	Total	Tourism characteristic industries									Other tourism industries	All other industries
		accommodation	F & B serving	Land transport	Air transport	Water transport	Motor vehicle rental	Travel agencies & other reservation	Art, recreation & leisure industries	Retail trade		
products												
Tourism characteristic products	6,399,111	114,862	800,766	162,083	186,178	9,207	64,175	53,799	190,434	4,817,607	0	0
Accommodation services	95,570	95,570										
F & B serving services	798,654	13,517	760,619						14,175	10,343		
Passenger transport services												
Land passenger services	161,374			161,374								
Air passenger services	184,221				184,221							
Water passenger services	9,155					9,155						
Motor vehicle rental services	47,298						47,298					
Travel agencies & other reservation services	53,727							53,727				
Art, recreation & leisure services	170,250								170,250			
Shopping services	4,878,862	5,774	40,148	709	1,957	52	16,877	72	6,009	4,807,264		
Other tourism products	3,257,278	2,113	6,489	292				527	5,585		3,242,272	
Tourism products	9,656,389	116,975	807,255	162,375	186,178	9,207	64,175	54,326	196,019	4,817,607	3,242,272	
All other products	40,098,386	3,073	3,812	254,827	67,990	508,042	3,038	1,182	15,550	353,719	436,276	38,450,877
Total output (at producers' prices)	49,754,780	120,048	811,067	417,202	254,168	517,249	67,213	55,514	211,569	5,171,325	3,678,548	38,450,877
Intermediate consumption	27,978,644	67,661	432,477	221,927	156,741	199,291	27,464	27,704	83,920	3,902,422	1,204,377	21,654,660
Gross value added (at producers' prices)	21,776,136	52,387	378,590	195,275	97,427	317,958	39,749	27,811	127,649	1,268,903	2,474,171	16,796,217
Compensation of employees	9,370,285	52,035	258,080	95,378	38,838	21,647	4,666	18,504	93,313	563,702	1,440,289	6,783,833
Net production tax	1,023,879	-5,199	-1,209	-5,958	225	644	2,546	468	1,617	14,290	61,731	959,964
Fixed assets consumption	3,427,677	17,906	23,403	56,518	39,791	13,449	25,393	725	15,173	79,002	294,217	2,860,634
Gross operating surplus	7,954,295	-12,355	137,930	49,337	18,573	282,218	7,143	8,114	17,546	611,909	677,934	6,191,785

Exchange rate = 28.022 (NT\$/US\$)



**Table T5 Tourism ratio of tourism products 2021**

Tourism products	Tourism expenditure ( million NT\$ ) (1)	Tourism Supply ( million NT\$ ) (2)	Tourism product ratios (3)=(1)/(2)
Total	337,382	9,656,389	0.035
Tourism characteristic products	326,233	6,299,111	0.052
Accommodation services	66,595	95,570	0.697
Food & beverage serving services	78,309	798,654	0.098
Passenger transport services	35,140	354,750	0.099
Land passenger services	19,043	161,374	0.118
Air passenger services	14,046	184,221	0.076
Water passenger services	2,050	9,155	0.224
Motor vehicle rental services	32,345	47,298	0.684
Travel agencies & other reservation services	13,975	53,727	0.260
Art, recreation & leisure ser.	12,491	170,250	0.073
Shopping services	87,379	4,878,862	0.018
Other tourism products	11,149	3,257,278	0.003

Exchange rate = 28.022 (NT\$/US\$)

**Table T6 Tourism ratio of tourism industries 2021**

Unit: million NT\$

industries products	Total	Tourism characteristic industries									Other tourism industries
		accommodation	F & B serving	Land transport	Air transport	Water transport	Motor vehicle rental	Travel agencies & other reservation	Art, recreation & leisure industry	Retail trade	
Tourism characteristic products											
Accommodation services	66,595	66,595									
Food & beverage serving ser.	77,634	1,325	74,580						1,390	339	
Passenger transport services											
Land passenger services	19,043			19,043							
Air passenger services	14,046				14,046						
Water passenger services	2,050					2,050					
Motor vehicle rental services	32,345						32,345				
Travel agencies & other reservation services	13,975							13,975			
Art, recreation and leisure services	12,491	0*							12,491		
Shopping services	30,065	103	719	13	35	1	302	1	108	28,783	
Other tourism product	11,149	7	22	1				2	19		11,097
Tourism output value	279,393	68,031	75,321	19,057	14,081	2,051	32,647	13,978	14,007	29,122	11,097
Total supply of tourism industries	7,861,408	120,048	811,067	417,202	254,168	517,24	67,113	55,514	211,569	1,728,830	3,678,548
Tourism industry ratios	0.04	0.57	0.09	0.05	0.06	0.004	0.49	0.25	0.07	0.02	0.003

\*tiny value, non-zero.

Exchange rate = 28.022 (NT\$/US\$)

**Table T7 Tourism Direct Gross Value Added 2021**

Unit: million NT\$

industries	Total	Tourism characteristic industries									Other tourism industries
		Accommodation	F & B serving	Land transport	Air transport	Water transport	Motor vehicle rental	Travel agencies & other reservation	Art, recreation & leisure industry	Retail trade	
Total output value	7,861,408	120,048	811,067	417,202	254,168	517,249	67,213	55,514	211,569	1,728,830	3,678,548
Intermediate inputs	2,881,489	67,661	432,477	221,927	156,741	199,291	27,464	27,704	83,920	459,927	1,204,377
Tourism industry ratios		0.57	0.09	0.05	0.06	0.004	0.49	0.25	0.07	0.02	0.003
Tourism output value	279,393	68,031	75,321	19,057	14,081	2,051	32,647	13,978	14,007	29,122	11,097
Tourism intermediate inputs	135,370	38,344	40,163	10,137	8,683	790	13,340	6,975	5,556	7,747	3,633
TDGVA	144,024	29,688	35,158	8,920	5,397	1,261	19,307	7,002	8,451	21,375	7,464
National GDP	21,776,136										
TDGVA/national GDP	0.66%										

Exchange rate = 28.022 (NT\$/US\$)

**Table T8 Employment in the tourism industries 2021**

Industries	Total	Tourism characteristic industries									Other tourism industries
		Accommodation	F & B serving	Land transport	Air transport	Water transport	Motor vehicle rental	Travel agencies & other reservation	Art, recreation, & leisure industries	Retail trade	
Tourism industry ratios		0.57	0.09	0.05	0.06	0.004	0.49	0.25	0.07	0.02	0.003
Number of persons engaged, end of 2016	2,752,198	95,922	504,974	202,972	25,036	8,002	6,735	31,126	82,810	903,042	891,579
Output value of tourism industries, 2016 (million NT\$)	6,933,454	163,608	778,896	419,039	288,759	200,914	56,923	50,075	225,580	1,517,199	3,232,461
Output value of tourism industries, 2021 (million NT\$)	7,861,408	120,048	811,067	417,202	254,168	517,249	67,213	55,514	211,569	1,728,830	3,678,548
Number of persons engaged in tourism industries, end of 2021	3,004,685	70,383	525,831	202,082	22,037	20,601	7,952	34,507	77,667	1,029,005	976,725
Number of persons engaged in tourism, end of 2021	137,339	39,886	48,832	9,231	1,221	82	3,863	8,688	5,142	17,334	3,061

Exchange rate = 28.022 (NT\$/US\$)

**Table T9 Tourism Indicators 2021**

<b>Tourism trips and Stay nights, by types of visitors</b>					
indicators	Inbound visitors	Outbound visitors	Domestic visitors		Total
			Same-day visitors	Overnight visitors	
Number of trips	96,268	359,977	90,613,413	35,413,587	126,027,000
Duration of trips (days)	58.55	32.19	1.0	2.56	1.45

<b>Number of establishments and capacity, by forms of accommodation</b>					
indicators	International tourist hotel	Standard tourist hotel	hotel	Home stay	
Number of establishments	77	44	3,364	10,372	
Capacity (rooms)	21,729	6,548	168,586	34,537	
Capacity utilization (rooms)	2,713,693	764,483	20,191,469	2,080,089	
Occupancy rate	34.25%	32.03%	32.72%	16.54%	

<b>Economic contribution, by types of visitors</b>					
indicators	Inbound visitors	Outbound visitors	Domestic visitors		Total
			Same-day visitors	Overnight visitors	
Tourism value added ( million NT\$ )	7,814	8,725	40,634	86,852	144,024
Tourism value added/Total National GDP ( % )	0.04	0.04	0.19	0.40	0.66
Tourism value added per visitor ( NT\$10,000 )	8.117	2.424	0.045	0.245	

Exchange rate = 28.022(NT\$/US\$)

