

Tourism and Hawaii Economy

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DBEDT Research Division

This brief presents contributions of tourism to Hawaii economy, estimated using the economic relationships reflected in the 2017 State of Hawaii Input-Output (IO) model. In estimating the impacts using the IO model, “direct and indirect” impact measures the impact of visitor expenditure through all firms that contributed, directly or indirectly, to goods and services sold to visitors, while “induced” impact measures the additional impact generated through the increased household income and spending after the initial impacts. Estimation of impacts on GDP and jobs are based on the latest GDP and job data from the U.S. Bureau of Economic Analysis (BEA) at the time of release and are subject to change when the Hawaii GDP and job data from BEA are revised.

Table 1. Total visitor related expenditure (\$M), 2017-2022 ¹

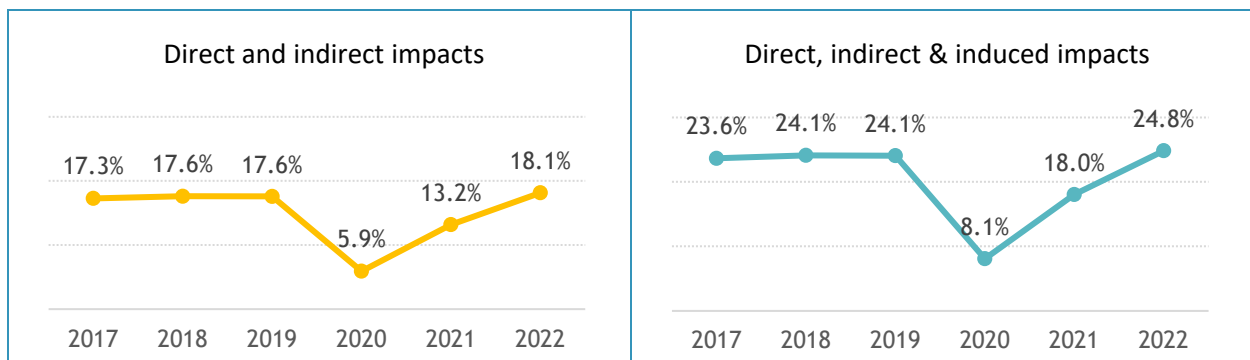
2017	2018	2019	2020	2021	2022
19,081	20,144	20,460	6,174	15,199	22,569

¹ Besides expenditure by visitors by air and cruise ship, it includes supplemental business expenditure and other estimated spending in Hawaii by overseas airlines and cruise lines.

Table 2. Impacts of total visitor-related expenditure on Hawaii economy, 2022

	Output (\$M)	GDP (\$M)	Tax (\$M)	Labor Income (\$M)	Total Jobs	W&S Jobs
Direct and indirect impact	31,158	17,814	2,072	10,042	172,255	136,877
Direct, indirect & induced impact	42,192	24,389	2,613	13,506	229,504	179,544

Figure 1. Contribution of tourism to Hawaii GDP, 2017-2022 ¹



¹ The percentages are based on the latest GDP data and subject to change when GDP data for Hawaii is revised.

Table 3. Contribution of tourism to Hawaii GDP, statewide and by county

Year	Statewide	Honolulu	Maui	Kauai	Hawaii
<i>Direct and indirect impacts</i>					
Contribution to the area's GDP (\$M)					
2017	15,061	9,333	2,864	1,172	1,693
2018	15,900	9,853	3,023	1,237	1,787
2019	16,149	10,007	3,071	1,257	1,815
2020	4,874	3,020	927	379	548
2021	11,997	7,434	2,281	934	1,348
2022	17,814	11,038	3,387	1,386	2,002
Percentage of the area's GDP					
2017	17.3%	14.3%	29.6%	30.7%	20.0%
2018	17.6%	14.7%	29.0%	29.7%	20.5%
2019	17.6%	14.8%	28.2%	29.0%	20.1%
2020	5.9%	4.9%	10.6%	10.2%	6.6%
2021	13.2%	11.0%	22.0%	22.4%	14.7%
2022 ¹	18.1%				
<i>Direct, indirect and induced impacts</i>					
Contribution to the area's GDP (\$M)					
2017	20,620	13,314	3,674	1,452	2,180
2018	21,769	14,056	3,878	1,533	2,302
2019	22,110	14,276	3,939	1,557	2,338
2020	6,672	4,308	1,189	470	705
2021	16,425	10,606	2,926	1,157	1,737
2022	24,389	15,748	4,345	1,718	2,579
Percentage of the area's GDP					
2017	23.6%	20.4%	37.9%	38.0%	25.8%
2018	24.1%	21.0%	37.1%	36.9%	26.4%
2019	24.1%	21.1%	36.2%	35.9%	25.9%
2020	8.1%	7.0%	13.6%	12.7%	8.5%
2021	18.0%	15.7%	28.3%	27.7%	18.9%
2022 ¹	24.8%				

¹ 2022 percentages for counties will be added when 2022 GDP data for counties become available in Dec. 2023

Table 4. Contribution of tourism to total jobs, statewide and by county

Year	Statewide	Honolulu	Maui	Kauai	Hawaii
<i>Direct and indirect impacts</i>					
Contribution to the area's jobs					
2017	173,000	100,376	34,919	15,170	22,534
2018	176,423	102,436	35,580	15,440	22,967
2019	173,102	100,579	34,881	15,120	22,522
2020	50,470	29,346	10,162	4,400	6,563
2021	120,050	69,850	24,152	10,446	15,603
2022	172,255	100,291	34,628	14,960	22,376
Percentage of the area's jobs					
2017	18.8%	15.2%	32.2%	33.0%	21.0%
2018	19.1%	15.6%	32.3%	33.0%	21.1%
2019	18.9%	15.6%	31.0%	31.7%	20.7%
2020	6.2%	5.0%	10.9%	10.8%	6.6%
2021	14.1%	11.6%	23.6%	24.4%	14.9%
2022 ¹					
<i>Direct, indirect and induced impacts</i>					
Contribution to the area's jobs					
2017	229,891	139,380	43,578	18,247	28,686
2018	234,568	142,302	44,418	18,585	29,263
2019	230,278	139,783	43,562	18,211	28,722
2020	67,176	40,801	12,695	5,303	8,377
2021	159,869	97,155	30,183	12,598	19,933
2022	229,504	139,550	43,288	18,054	28,612
Percentage of the area's jobs					
2017	25.0%	21.1%	40.1%	39.7%	26.7%
2018	25.4%	21.6%	40.3%	39.7%	26.9%
2019	25.2%	21.7%	38.7%	38.2%	26.4%
2020	8.2%	7.0%	13.6%	13.0%	8.4%
2021	18.8%	16.2%	29.5%	29.4%	19.0%
2022 ¹					

¹ 2022 percentages will be added when 2022 job data from BEA are released

Table 5. Direct and indirect contribution of tourism to Hawaii economy by sector, 2022

Sector	Output (\$M)	GDP (\$M)	Tax (\$M)	Labor Income (\$M)	Total Jobs	W&S Jobs
Total	31,158	17,814	2,072	10,042	172,255	136,877
Accommodation	8,361	3,947	883	2,145	26,979	25,905
Transportation	4,707	2,808	138	1,258	16,902	13,154
Real estate and rentals	3,603	2,521	184	442	8,433	3,280
Retail trade	3,031	1,986	198	1,121	27,196	21,592
Eating and drinking	2,717	1,283	178	1,027	26,606	25,079
Business services	2,059	1,216	152	1,063	18,166	14,627
Professional services	819	499	62	439	5,980	3,032
State and local gov't	761	625	27	548	6,105	6,115
Arts and entertainment	759	617	53	421	13,268	7,242
Mining and construction	658	328	46	278	2,711	2,064
Utilities	551	344	22	108	679	619
Wholesale trade	508	291	12	152	1,843	1,538
Information	421	191	17	82	911	736
Other manufacturing	387	93	4	43	679	451
Finance and insurance	378	173	17	98	1,486	843
Other services	363	164	21	176	4,391	2,485
Federal government	357	327	16	293	2,560	2,564
Educational services	239	199	20	171	4,088	3,227
Health services	224	119	17	110	1,293	1,085
Food processing	184	47	3	36	799	721
Agriculture	72	36	2	30	1,180	518

Figure 2. Hawaii GDP by sector, reclassified with tourism, 2022

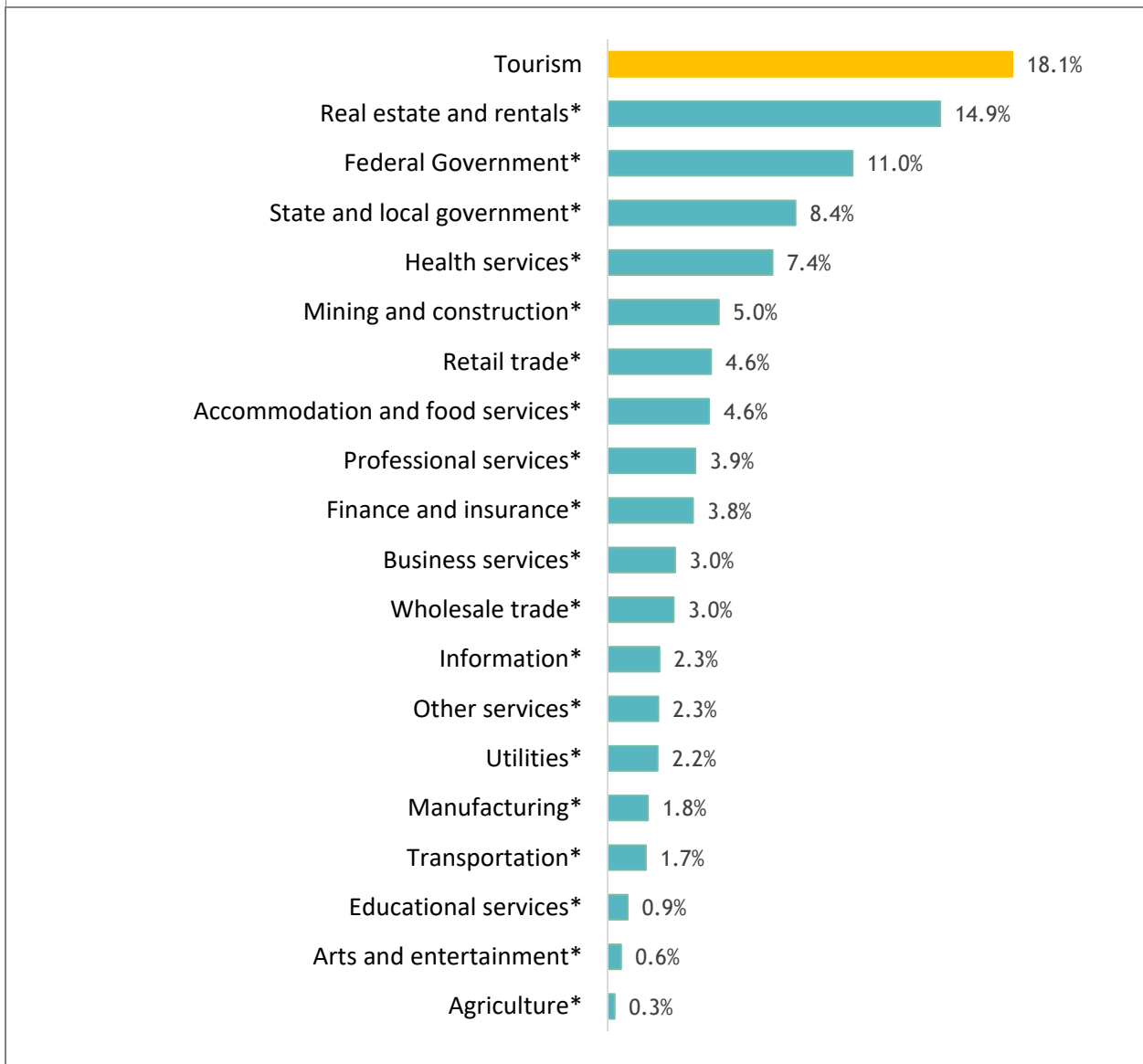
Methodology

Tourism is not defined in the standard industry classifications. To estimate the role of tourism in Hawaii GDP, GDP of tourism was estimated as follows and the original sectors were refined to exclude tourism portion in the sector.

Step 1: estimate contribution of tourism to each sector’s GDP using the 2017 Hawaii Input-Output model.

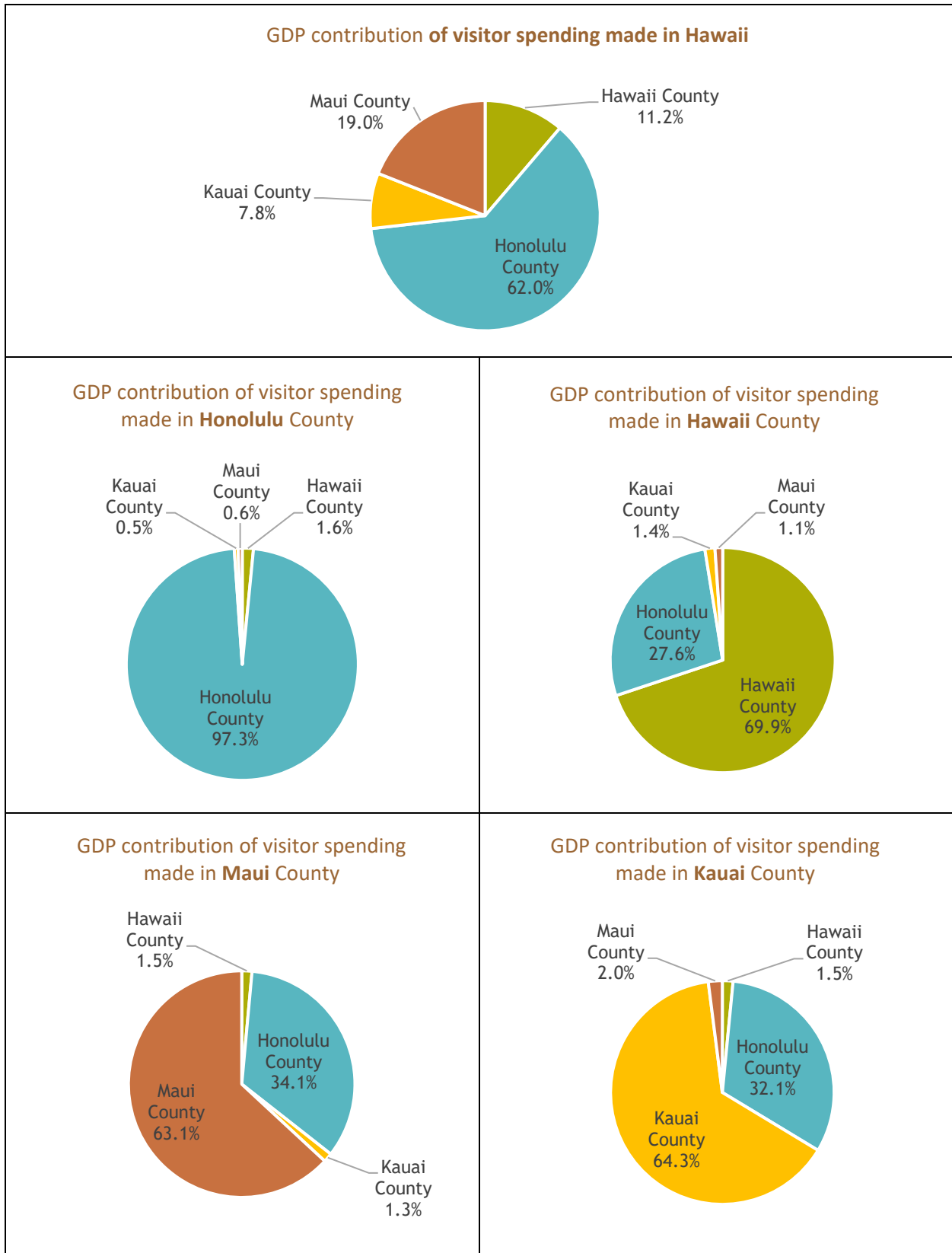
Step 2: estimate GDP of tourism sector as the sum of each sector’s GDP generated by tourism

Step 3: re-estimate GDP of other sectors without tourism portion



* non-tourism portion of the sector (tourism portion was subtracted from original GDP of the sector)

Figure 3. GDP contribution of visitor spending by counties benefited



Estimated impacts of \$1 billion visitor spending in 2022

Table A-1. Estimated impacts of \$1 billion visitor spending in 2022 on Hawaii economy
(Direct and indirect impacts)

Sector	Output (\$M)	GDP (\$M)	Tax (\$M)	Labor Income (\$M)	Total Jobs	W&S Jobs
Total	1,380.6	789.3	91.8	444.9	7,633	6,065
Accommodation	370.5	174.9	39.1	95.1	1,195	1,148
Transportation	208.6	124.4	6.1	55.8	749	583
Real estate and rentals	159.6	111.7	8.2	19.6	374	145
Retail trade	134.3	88.0	8.8	49.7	1,205	957
Eating and drinking	120.4	56.8	7.9	45.5	1,179	1,111
Business services	91.2	53.9	6.7	47.1	805	648
Professional services	36.3	22.1	2.7	19.5	265	134
State and local gov't	33.7	27.7	1.2	24.3	270	271
Arts and entertainment	33.6	27.3	2.4	18.7	588	321
Mining and construction	29.1	14.5	2.0	12.3	120	91
Utilities	24.4	15.2	1.0	4.8	30	27
Wholesale trade	22.5	12.9	0.5	6.7	82	68
Information	18.7	8.5	0.8	3.6	40	33
Other manufacturing	17.1	4.1	0.2	1.9	30	20
Finance and insurance	16.7	7.7	0.8	4.3	66	37
Other services	16.1	7.3	0.9	7.8	195	110
Federal government	15.8	14.5	0.7	13.0	113	114
Educational services	10.6	8.8	0.9	7.6	181	143
Health services	9.9	5.3	0.7	4.9	57	48
Food processing	8.2	2.1	0.2	1.6	35	32
Agriculture	3.2	1.6	0.1	1.3	52	23

Table A-2. Estimated impacts of \$1 billion visitor spending in 2022 on Hawaii economy
(Direct, indirect and induced impacts)

Sector	Output (\$M)	GDP (\$M)	Tax (\$M)	Labor Income (\$M)	Total Jobs	W&S Jobs
Total	1,869.5	1,080.7	115.8	598.5	10,169	7,955
Accommodation	386.8	182.6	40.8	99.2	1,248	1,198
Real estate and rentals	284.6	203.2	11.7	27.4	536	188
Transportation	228.1	135.6	6.8	61.5	850	648
Retail trade	166.0	108.8	10.8	61.4	1,489	1,182
Eating and drinking	144.0	68.0	9.4	54.4	1,410	1,329
Business services	112.7	68.0	8.4	59.4	1,021	820
Health services	76.4	41.6	5.4	38.5	513	440
Professional services	53.4	32.4	4.0	27.9	391	191
State and local gov't	45.9	37.7	1.6	33.1	368	369
Finance and insurance	45.7	21.9	2.3	12.1	187	103
Wholesale trade	42.7	24.4	1.0	12.8	155	129
Other services	42.1	18.2	2.1	20.0	425	260
Mining and construction	38.7	19.3	2.7	16.3	159	121
Information	37.9	17.5	1.5	7.5	82	68
Arts and entertainment	37.1	30.2	2.6	20.6	649	354
Utilities	35.9	22.5	1.4	7.0	45	41
Other manufacturing	33.4	7.8	0.3	3.4	50	34
Federal government	23.8	21.8	1.1	19.5	170	171
Educational services	15.9	13.2	1.3	11.4	272	215
Food processing	13.0	3.3	0.2	2.5	56	51
Agriculture	5.5	2.8	0.2	2.5	92	43