

The Impacts of the Film Industry On 2022 Tourism in Hawai‘i



Research & Economic Analysis Division

**Department of Business, Economic Development
& Tourism**

STATE OF HAWAI‘I

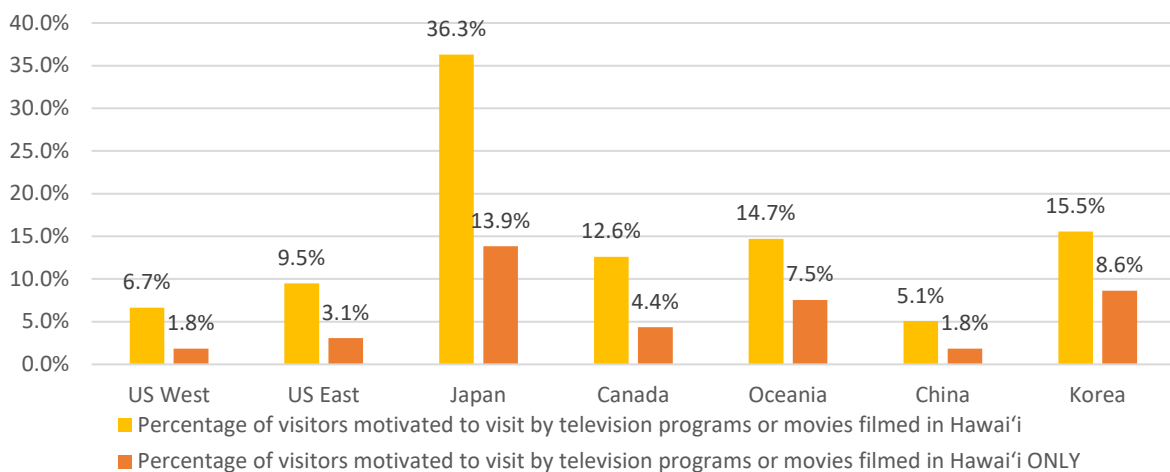
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This report was produced by the Research and Economic Analysis Division (READ) of the Department of Business, Economic Development & Tourism (DBEDT). It was prepared by Rene Kamita, Ph.D., Economist, under the direction of Eugene Tian, Ph.D., Economic Research Administrator. Jennifer Chun and Minh-Chau Chun of the Tourism Research Branch provided data for this report.

Visitors to Hawai‘i and the Hawai‘i Film Industry

The Department of Business, Economic Development and Tourism (DBEDT) compiles, through its Annual Visitor Satisfaction and Activity (VSAT) survey, statistics on the impacts of movie and television location filming on tourism. Figure 1 shows the percentage of visitors from U.S. West, U.S. East, Japan, Canada, Oceania, China and Korea motivated to visit Hawai‘i in 2022 due to television or movies filmed in Hawai‘i. Visitors from these markets indicated that television programs and movies filmed in Hawai‘i prompted them to visit, with visitors from Japan being the most likely to indicate that they were motivated to visit due to a television program or movie filmed in Hawai‘i (36.3%). Figure 1 also shows the percentage of visitors from each market who solely selected television or movies filmed in Hawai‘i as the motivating factor for their visit.¹ Almost 14% of visitors from Japan selected television or movies filmed in Hawai‘i as the only motivating factor for their trip, followed by 8.6% of visitors from Korea and 7.5% of visitors from Oceania.

Figure 1. Percentage of Visitors that were Motivated to Visit due to Television Programs or Movies Filmed in Hawai‘i, Statewide, by Visitor Market, 2022

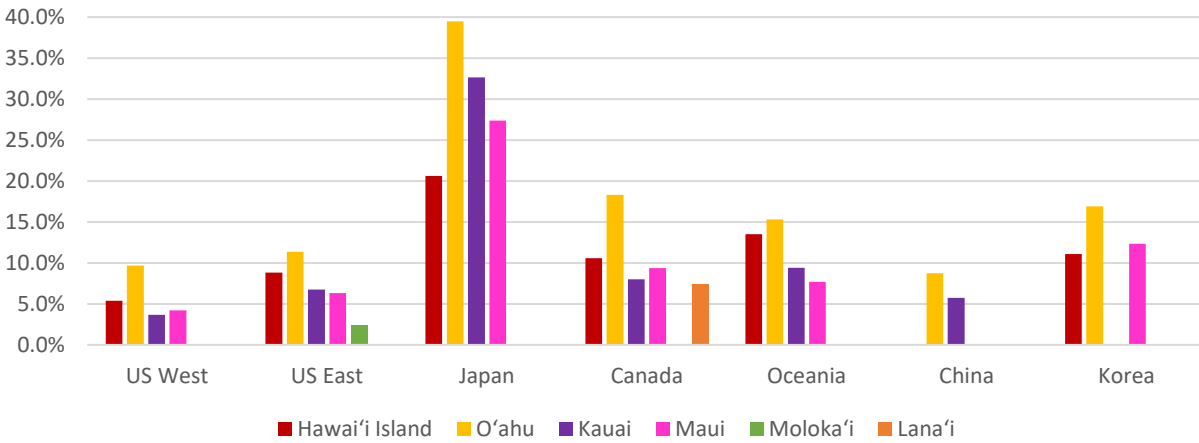


Source: DBEDT 2022 Visitor Satisfaction & Activity survey.

Figure 2 shows the percentage of visitors motivated to visit due to television or movies filmed in Hawai‘i, by island visited and by market. Among the islands, visitors to O‘ahu were more likely to indicate that their visit was influenced by television programs and movies filmed in the state, ranging from 8.7% of visitors from China to 39.5% of visitors from Japan.

¹ Respondents could also select Hawaiian music, social media posts and videos, outdoor or sporting activities and events, Hawaiian cultural events, famous landmarks or imagery/natural beauty, and “none of these” as motivating factor(s) for their visit.

Figure 2. Percentage of Visitors that were Motivated to Visit due to Television Programs or Movies Filmed in Hawai‘i, by Island Visited and Visitor Market, 2022



Source: DBEDT 2022 Visitor Satisfaction & Activity Report.

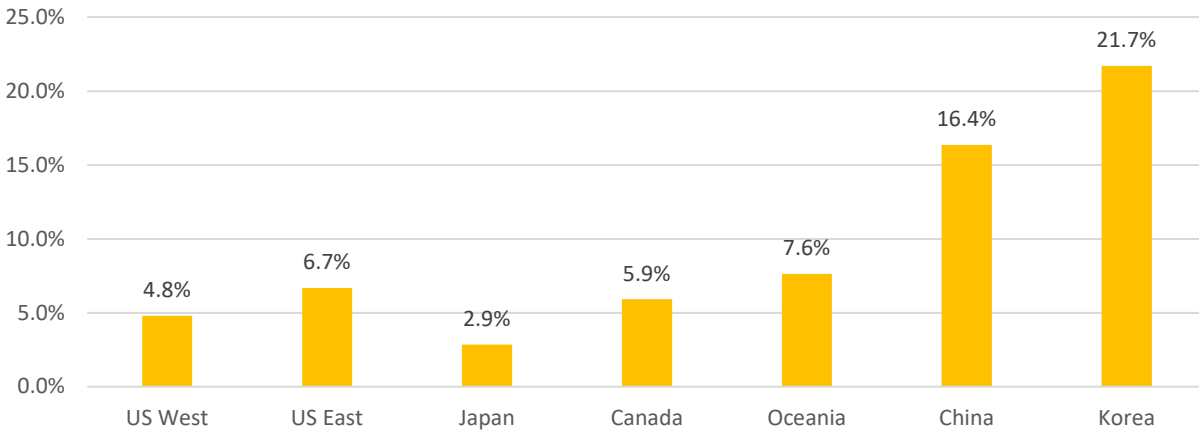
Based on the 2022 VSAT survey results, approximately 8.2% of visitors by air were motivated to visit, at least in part, due to television programs or movies filmed in Hawai‘i.² If visitors are “weighted” to reflect the relative importance of television programs or movies filmed in Hawai‘i as a motivating factor for their visit, where it is assumed that a visitor who identified television or movies filmed in Hawai‘i as the only motivating factor visited wholly because of location filming, the equivalent of 4.8% of visitors to Hawai‘i came in 2022 due to television programs or movies filmed in the state.³

In addition to whether their visit was motivated by television programs or movies filmed in Hawai‘i, visitors were asked whether they participated in movie and television filming location tours during their visit. Although visitors from Japan were most likely to be motivated to visit due to television programs or movies filmed in Hawai‘i, they were the least likely to participate in a movie or television filming location tour. See Figure 3. Visitors from Korea and China were the most likely to participate in movie or television filming location tours (21.7% and 16.4%, respectively).

² The 2022 VSAT survey includes responses from the US West, the US East, Japan, Canada, Oceania, China, and Korea. Together, visitors from these markets comprise 94.8% of all visitor arrivals by air. VSAT survey responses are assumed to be representative of the preferences and behavior of all air visitors from that market. No impact from movie and television filming in Hawai‘i is assumed for visitors from areas outside of these seven markets.

³ Weights are inversely proportional to the number of motivating factors identified by the visitor. If, for example, a visitor identified television or movies filmed in Hawai‘i and one additional motivating factor, that visitor is assigned a weight of 0.5. If the visitor identified television or movies filmed in Hawai‘i and two additional motivating factors, that visitor is assigned a weight of 0.33, and so on.

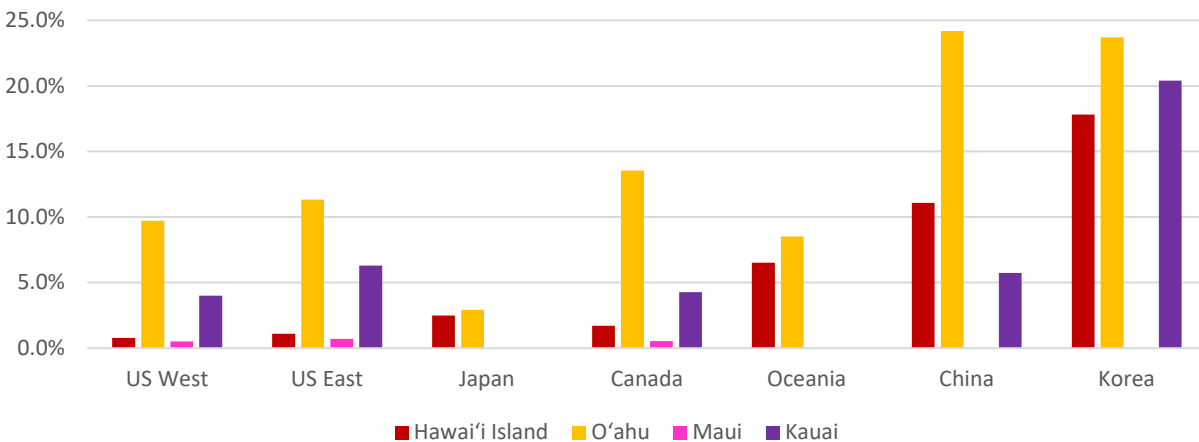
Figure 3. Percentage of Visitors that Participated in Movie and Television Location Tours, Statewide, by Visitor Markets, 2022



Source: DBEDT 2022 Visitor Satisfaction & Activity Report.

Figure 4 shows that visitors to O‘ahu were the most likely to have participated in a movie or television filming location tour, ranging from 2.9% of visitors from Japan to 23.7% of visitors from Korea and 24.2% of visitors from China. No visitors to Lāna‘i or Moloka‘i indicated that they participated in a movie or television filming location tour.

Figure 4. Percentage of Visitors that Participated in Movie and Television Location Tours, by Island(s) Visited and Visitor Market, 2022



Source: DBEDT 2022 Visitor Satisfaction & Activity Report. No visitors to Lāna‘i or Moloka‘i indicated that they participated in movie and television location tours.

Overall, approximately 5.4% of visitors statewide participated in movie and television filming location tours.

Analysis of the Impacts of Filming in Hawai‘i on 2022 Visitor Arrivals and Spending

To estimate the impacts of television and movies filmed in Hawai‘i on tourism, the following assumptions were made:

1. For visitors who selected television programs or movies filmed in Hawai‘i as the only motivating factor for their visit, the entirety of their trip is attributed to filming in Hawai‘i.
2. For visitors who selected television programs or movies filmed in Hawai‘i as one of two or more motivating factors for their visit, it is assumed that the proportion of their trip attributed to tourism is inversely proportional to the total number of motivating factors that were identified. For example, if a visitor identified television or movies filmed in Hawai‘i and one additional motivating factor, it is assumed that one half of the trip is due to locational filming. If television or movies filmed in Hawai‘i and two additional motivating factors were selected, one third of the trip is assumed due to location filming, and so on.
3. If visitors did not select television programs or movies filmed in Hawai‘i as a motivating factor for their visit but went on a movie and television filming location tour, it is assumed that one day of their visit may be attributed to television or movies filmed in Hawai‘i.

Table 1 summarizes the results of this analysis. As shown, the vast majority of 2022 visitor days and spending motivated by television programs and movies filmed in Hawai‘i were from US West and US East visitors. Although these markets had lower percentages of visitors who identified location filming as a reason for their visit, visitors from the US West and US East comprised 57.7% and 27.0% respectively of all air arrivals in 2022. As a result, the impacts of visitors from the U.S. are large relative to the impacts of visitors from the international markets.

A total of 4.5 million visitor days in 2022 were attributed to visitors who visited Hawai‘i due to television programs and movies filmed in Hawai‘i and/or visitors who participated in movie and filming location tours. Total visitor spending in 2022 attributed to visitors who visited Hawai‘i due to television programs and movies filmed in Hawai‘i and/or visitors who participated in movie and filming location tours was \$1.0 billion. The distribution of visitor days and visitor spending by market is provided in Figures 5 and 6.

Table 1. Estimated Impacts of Television Programs and Movies Filmed in Hawai‘i on 2022 Visitor Days and Expenditures, Total and by Visitor Market

	Visitor Market							Total
	US West	US East	Japan	Canada	Oceania	China	Korea	
Trips motivated by television programs and movies filmed in Hawai‘i								
(1) Visitors (persons) ^{1/}	190,521	137,633	43,736	31,710	19,635	452	13,094	436,781
(2) Average Length of Stay (days)	8.62	9.90	7.93	12.24	9.73	8.43	8.65	
(3) Visitor days (thousands) (1) x (2)	1,642	1,363	347	388	191	4	113	4,048
Trips not motivated by television programs and movies filmed in Hawai‘i but visitors toured movie and tv filming locations								
(4) Visitor days - movie and tv filming location tours (thousands)	211	136	4	18	10	2	25	405
(5) Total visitor days (thousands) (3) + (4)	1,853	1,498	351	406	201	6	138	4,453
(6) Per Person Per Day Spending (dollars)	\$ 221.82	\$252.14	\$235.42	\$189.77	\$284.72	\$341.32	\$293.14	
(7) Visitor Spending (\$ million) (5) x (6)	\$ 411.1	\$ 377.8	\$ 82.6	\$ 77.0	\$ 57.3	\$ 1.9	\$ 40.4	\$1,048.2

1/ Visitor counts are adjusted to reflect the relative share of the factor “television programs or movies filmed in Hawai‘i” as a motivating factor for the visit.

Sources: DBEDT 2022 Visitor Satisfaction & Activity survey and DBEDT Tourism Data Warehouse. Calculations by DBEDT.

Figure 5. Share of Visitor Days, by Market
Total visitor days in 2022 attributed to TV and movie filming: 4.5 million days

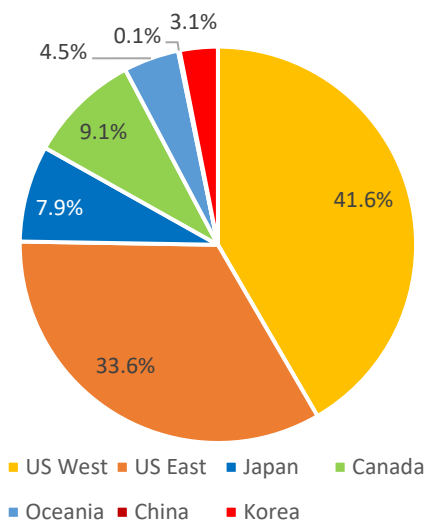
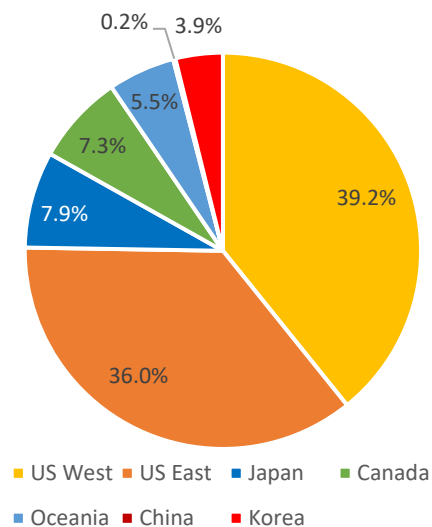


Figure 6. Share of Visitor Spending, by Market
Total visitor spending in 2022 attributed to TV and movie filming: \$1.0 billion



The economic impacts of the \$1.0 billion in visitor spending attributed to television program and movie filming can be assessed using multipliers from The Hawai‘i State Input-Output Study: 2017 Benchmark Report.⁴ Based on this, the visitor spending associated with television program and movie filming in Hawai‘i generated \$1,163.5 million in gross domestic product (GDP), \$543.6 million in earnings, and \$121.6 million in state tax revenues. Note that because earnings are embedded in GDP, these measures cannot be added and simply represent impacts from different perspectives.

In sum, results from the 2022 VSAT survey and visitor arrival and expenditure data support the importance of the film industry in promoting Hawai‘i as a tourist destination. Approximately 12.7% of all visitors were motivated at least in part to visit Hawai‘i due to television programs and movies filmed in Hawai‘i or participated in a television program and movie filming location tour. When adjusted for the number of items identified in addition to television programs and movies filmed in Hawai‘i as a motivating factor to visit, it is estimated that approximately 4.5 million visitor days (5.3%) and \$1.0 billion in visitor spending (5.3%) in 2022 may be attributed the film industry in Hawai‘i.

It is important to note the limits of this analysis. Since the impacts of television program and movie filming may last for several years after the initial program broadcast, the total visitor and spending impacts on tourism in any given year cannot be attributed to one particular year of filming. Visits and location tours in 2022 are likely due to the cumulative effect of years of television program and movie filming in Hawai‘i. In addition, this analysis does not consider the extent to which visitors would have visited Hawai‘i even if the television programs or movies they saw had not been filmed in Hawai‘i, or what activities visitors would have engaged in if they did not participate in filming location tours.

⁴ DBEDT, 2020. The Hawai‘i State Input-Output Study: 2017 Benchmark Report. https://dbedt.hawaii.gov/economic/reports_studies/2017-io