

The Economic Impact of International Students in Hawaii – Calendar Year 2020





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Department of Business, Economic Development & Tourism Research and Economic Analysis Division

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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) in collaboration with the Study Educational Hawaii Consortium. This report was produced by Joseph Roos, Ph.D. under the direction of the Economic Research Administrator Eugene Tian, Ph.D. Survey design was done by Naomi Akamine.

EXECUTIVE SUMMARY

The 2021 Hawaii International Education Survey (IES) collected data for the calendar year of 2020 regarding the number of international students, the program length and expenditure amounts of these students and estimated the contribution to the state's economy. The report also examined the country of origin of international students and their relative ranking.

The 2021 IES covered calendar year 2020, which included impacts associated with the COVID-19 pandemic. This year 37 institutions responded, with 7 indicating that they did not have any international students for calendar year 2020. The total number of students reported by the respondents was 5,496 students, less than half that of the previous year's survey. The number of long-term international students held steady, as universities were able to pivot to online learning and retain students in degree programs. However, the short-term programs, such as English language study, were hit hard. It appears these students opted to cancel or postpone their study rather than travel internationally during the pandemic.

This report is an update of previous reports published in 2009, 2015, 2016, 2017, 2018, 2019, and 2020. In looking at previous reports, the 2018 report had 34 responses, representing 12,916 international students; the 2019 report had 41 responses, representing 14,300 international students and the 2020 report had 44 responses, representing 13,371 students.

For calendar year 2020, the direct spending of international students in the State of Hawaii was an estimated \$113.2 million. This amount included tuition and fees plus living expenses. Based on this direct impact, the total economic impacts of international student expenditures for calendar year 2020 were as follows:

- \$223.0 million in economic output generated, including direct, indirect, and induced effects.
- \$15.7 million in state taxes generated.
- \$97.3 million in household income generated.
- 3,011 jobs were supported by international student spending.

The average 2020 total spending per student was \$28,081 for long-term students and \$7,096 for short-term students, including living expenses and tuition with fees.

Hawaii's educational institutions hosted a diverse group of students from all over the globe. Japan remains the top country of origin for Hawaii's international students comprising 32.3 percent of the total. Japan was followed by the South Korea with 13.7 percent, China with 10.7 percent (including Hong Kong and Macao), Philippines with 4.5 percent, and Tonga with 2.9 percent.

It is important to note that the economic impact estimates do not include contributions from educational travel to Hawaii from foreign-based educational institutions. The estimates also do not include educational travel covering school excursions and other types of education-related travel from Japan, China, Taiwan, and South Korea, and its economic impact.

I. INTRODUCTION

This report is based on the annual *Hawaii International Education Survey* (IES), which is a collaboration between the Study Hawaii Educational Consortium and the State of Hawaii's Department of Business, Economic Development, & Tourism (DBEDT). The survey provides an annual benchmark to estimate the economic impact and number of international students studying in Hawaii and is sent to schools in Hawaii that host international students. This year's report covers the calendar year of 2020, which includes the impacts of the COVID-19 pandemic.

As with previous surveys, the current 2021 IES was conducted online and requested Hawaii's educational institutions to provide the following data:

- The number of international students enrolled in various programs during the 2020 calendar year.
- The length of academic programs for international students.
- The tuition and fees paid by international students.
- The cost-of-living expenditures incurred by international students.
- The country of origin for the international students studying in Hawaii.

The survey questionnaire is listed in Appendix I.

This report is divided into four sections; after Section I Introduction, Section II examines the direct, indirect, and induced impacts of international student spending on Hawaii's economy and the results of the 2021 IES. Section III analyzes the results of the 2021 IES, such as specifics on student spending, financial aid, and countries of origin. This section also provides a summary of results from previous surveys. Finally, Section IV concludes by summarizing the survey results.

II. 2021 HAWAII INTERNATIONAL EDUCATION SURVEY-ECONOMIC IMPACT ANALYSIS

The estimate of the economic impact of international students studying in the State of Hawaii was calculated based on the results of the 2021 IES, conducted in the second quarter of 2021. Caution should be used when comparing the current survey results with previous survey results due to variation in the survey respondents and methodology.

Data Collection and Sources. The current survey was administered online. The sampling frame consisted of educational institutions located in Hawaii and identified by the U.S. Department of Homeland Security's (DHS) database called SEVIS (Student and Exchange Visitor Information System). The questions of the online survey are available in Appendix I and the list of the institutions the survey was sent to is in Appendix II.

The survey asked educational institutions to report the number of international students and the estimated expenses for tuition/fees and living expenses incurred by international students for calendar year 2020. The educational institutions were also asked the level and type of study programs for international students (e.g., middle and high schools' students, undergraduate students, non-degree seeking students, etc.).

Responses were received from 37 educational institutions in Hawaii, for a response rate of 53.0 percent. Of the 37 institutions, 7 indicated that they did not have any international students for calendar year 2020. The institutions responding to the 2021 IES accounted for 5,496 international students for the 2020 calendar year, representing a majority of Hawaii's international students.

This year the annual living expense amount was reduced by 15 percent to account for those students that telecommuted from their home countries for part of the year due to COVID-19. This adjustment was based on estimates from a sub-set of educational institutions in the sample.

Methodology. The analysis presents two different estimates:

- 1) Direct Impact: This is an estimate of the direct dollar amount spent in Hawaii by international students including tuition, fees, and living expenses.
- 2) Direct + Indirect + Induced Impact: This is the direct impact plus the indirect and induced impacts, including the ripple effects of international student expenditures on output, household income, state tax revenue, and jobs.

1. Direct Economic Impact. The methodology to measure the direct impact of international students studying in Hawaii was based on the reported data provided by each respective institution. The calculation aggregated the tuition/fees plus living expenses minus the financial assistance awarded for all the institutions that responded to the survey. Non-responses were not included in the total and, therefore, the estimates are on the conservative side. The formula for calculating the direct economic impact of international students studying in Hawaii is:

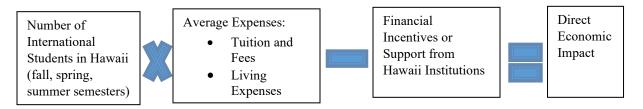


Table 1 presents a summary account of the different types of international students in Hawaii and the amount spent on tuition and fees plus living expenses. These categories show the direct economic impact of international student spending on the state's economy.

In previous years, a majority of Hawaii's international students were enrolled in non-degree-short-term programs, including English language schools, camps, and vocational programs. However, due to the impacts of the pandemic, the number of short-term international students fell below long-term students to 1,961 or 36 percent of the total. These students generated \$13.9 million in direct spending, which comprised 12.3 percent of international student total spending for 2020.

The long-term category included students enrolled full-time for at least one semester (spring, summer, or fall), and tuition and living expenses were calculated for each semester and summed to an annual total. In addition to university level, this category also included international students enrolled full-time at the middle and high school level. The number of long-term students was 3,535, which comprised about 64 percent of total international students reported in the survey results. These students generated \$99.3 million in direct spending, which accounted for 87.7 percent of the total spending.

Table 1: Direct Economic Impact of International Students in Hawaii for Calendar Year 2020

		Spending by International Students on		
Category	Number of Students	Tuition & Fees	Living Expenses*	Total
Long-Term Students	3,535	\$54,776,417	\$44,489,054	\$99,265,470
Middle/high school students	219	\$4,884,476	\$4,233,816	\$9,118,292
Degree-seeking undergraduate students	2,692	\$35,516,045	\$31,248,309	\$66,764,354
Degree-seeking graduate students	624	\$14,375,896	\$9,006,929	\$23,382,825
Short-Term Students	1,961	\$5,968,207	\$7,946,393	\$13,914,600
Non-degree-seeking undergraduate students	510	\$3,137,285	\$2,417,091	\$5,554,376
Non-degree-seeking graduate students	93	\$900,350	\$558,076	\$1,458,426
Short-term training program students/professionals	886	\$1,643,985	\$1,390,077	\$3,034,062
Students in summer/winter camps	246	\$284,157	\$338,704	\$622,861
Visiting scholars/teachers	226	\$2,430	\$3,242,445	\$3,244,875
Total	5,496	\$60,744,623	\$52,435,447	\$113,180,070

Source: DBEDT, 2021 IES

2. Total Economic Impacts. The total economic impacts for the state included the direct, indirect and induced impacts. The multipliers used for this calculation are from *The Hawaii State Input-Output Study: 2017 Benchmark Report*. Type II final demand multipliers were used, which include direct, indirect, and induced effects.

^{*}Living expenses were reduced by 15% to account for international students that telecommuted from their home countries for part of the year.

¹ DBEDT. 2020. The Hawaii State Input-Output Study: 2017 Benchmark Report. August.

The following formula was used to calculate the total economic impact and the number of jobs supported by international students in Hawaii for calendar year 2020:

Direct Economic Impact



Derived Multipliers for the Industry (Colleges, Universities, and Professional Schools)



- -- Total Economic Output
- -- Total Household Income
- -- State Tax Impact
- -- Number of Jobs Supported

Table 2 summarizes the findings and shows the economic impact of international students studying in Hawaii.

Table 2: Total Economic Impact of International Students in Hawaii, 2020

Direct Spending (from Table 1)		\$113,180,070
	Final Demand Multiplier (Type II)	Economic Impact (Type II)
Total Output Generated	1.97	\$222,964,738
Total Household Income Generated	0.86	\$97,334,860
Total State Taxes Generated	0.139	\$15,732,030
Total Jobs Supported	26.6 (per \$million)	3,011

Source: DBEDT, calculations are based on the *Hawaii State Input-Output Study: 2017 Benchmark Report* (December 2020)

The *total output generated* is an estimate of the total dollar change in output for all industries in the state, resulting from the inflow of money spent by international students in Hawaii. Based on this analysis, the total output generated by international student spending for calendar year 2020 was an estimated \$223.0 million.

Total household income generated refers to the estimated household earnings that can be attributed to international students studying in the state. Hawaii households earned an estimated total of \$97.3 million generated from international students for calendar year 2020.

The *total state taxes generated* line shows the estimated state tax revenue that can be attributed to international students studying in Hawaii. An estimated \$15.7 million in state taxes was generated by international student spending in the state for calendar year 2020.

The last line of the table shows the *total number of jobs supported* by international students studying in Hawaii. Given an estimated direct economic impact of \$113.2 million for calendar year 2020, 3,011 jobs were supported. As noted above, these estimates are based on the Type II multiplier, which includes direct, indirect, and induced effects.

III. RESULTS OF THE 2020 INTERNATIONAL EDUCATION SURVEY

Data comparisons

Figure 1 below highlights the results of the 2021 IES by the program length and compares these with the two previous survey results. The results show a higher percentage of students enrolled in long-term programs compared with short-term programs, with 64 percent and 36 respectively. This is a reverse from previous years that had a higher percentage of short-term students compared with long-term students. The data shows that long-term study programs were more resilient to the pandemic as universities were able to pivot to online learning and retain degree-seeking students. On the other hand, short-term students opted to cancel or postpone their study rather than study internationally during the pandemic. Furthermore, as student numbers declined, some institutions that focused on short-term programs were forced to close.

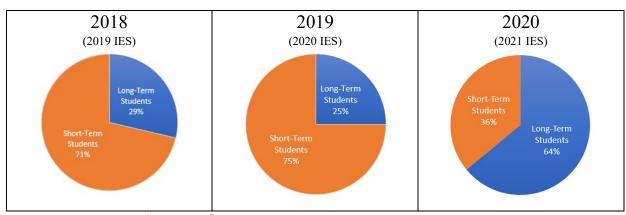


Figure 1. Categories of International Students in Hawaii

Source: DBEDT: respective years of IES

From an economic development perspective, long-term students have a greater impact on the state's economy because they spend more on an average annual basis than short-term students.² In addition to bringing in more revenue for educational institutions, long-term students have a stronger ripple effect as they pay rent, buy groceries, and spend on other items for a longer period of time than short-term students.

As shown in Table 3, the direct impact of long-term students on the local economy was \$99.3 million and the short-term student impact was \$13.9 million for calendar year 2020. While the dollar impact was less, short-term programs are an important part of Hawaii's international education ecosystem, because they serve as a bridge for students to transition into long-term degree programs.

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²The Economic Impact of International Students in Hawaii, 2015 (DBEDT)

Table 3. Spending by International Students in Hawaii by Program Length: 2020 Calendar Year

Category	Long-Term Programs	Short-Term Programs
Number of Students	3,535	1,961
Total Spending (\$)	\$99,265,470	\$13,914,600
Living Expenses (\$)*	\$44,489,054	\$7,946,393
Tuition and Fees (\$)	\$54,776,417	\$5,968,207
Average Annual Spending Per Student (\$)	\$28,081	\$7,096

Source: DBEDT, 2021 IES

Spending per student. The overall average annual spending per student for calendar year 2020 was \$20,593, including both long-term and short-term students. As shown in table 3, the average annual spending for long-term students was 28,081 (\$12,585 for living expenses and \$15,496 for tuition/fees) and short-term students was \$7,096 (\$4,052 for living expenses and \$3,044 for tuition/fees). Table 4 below shows the direct impact (total spending by international students) and total economic impacts on the economy of the State of Hawaii for the current survey and the two previous surveys of the IES.

Table 4. Summary of Economic Impacts: 2018, 2019, and 2020

	2018 (2019 IES)	2019 (2020 IES)	2020 (2021 IES)
Total Direct Spending	\$216,865,847	\$185,026,598	\$113,180,070
Output Multiplier	2.06	2.06	1.97
Earnings Multiplier	0.91	0.91	0.86
State Tax Multiplier	0.158	0.158	0.139
Employment Multiplier (jobs per \$m)	21.1	20.3	26.6
Total Output Generated	\$446,743,645	\$381,154,792	\$222,964,738
Total Income Generated	\$197,347,921	\$168,374,204	\$97,334,860
Total State Taxes Generated	\$34,264,804	\$29,234,202	\$15,732,030
Total Jobs Supported	4,576	3,756	3,011

Source: DBEDT The Hawaii State Input-Output Study: 2017 Benchmark Report (2020); The Hawaii State Input-Output Study: 2012 Benchmark Report (2016) for 2019 and 2020 reports.

^{*}Living expenses were reduced by 15% to account for international students that telecommuted from their home countries for part of the year.

Financial aid to International students and net spending per student. Financial aid and other resources are used as an incentive to attract international students. The total financial aid for international students for calendar year 2020 was \$1,688,294, which was significantly below the \$4,573,448 estimate for the previous year. It is important to note that these are scholarships and grants offered by the institutions and do not include RA/TA assistance. Generally, international students are eligible only for merit aid provided by the host institutions. However, students who are U.S. permanent residents are also eligible for federal financial aid, in addition to any available institutional aid. At most institutions, financial aid is only provided for long-term students, those who are taking classes for credit and are working towards completion of requirements for a degree.

At the *undergraduate level* for calendar year 2020, the average annual expense for tuition and cost of living for a full-time international student in Hawaii was \$24,801. These figures are after the average annual financial assistance was subtracted, which reduced the total cost per student by approximately \$296 annually (Figure 2). The average tuition amount included community colleges, which generally had lower tuition than the four-year universities.

At the *graduate level* for calendar year 2020, the average annual expense for tuition and cost of living for a full-time graduate or professional international student in Hawaii was \$37,472. These figures were after the financial assistance was subtracted, which reduced the total cost per student by approximately \$465 annually (this does not include RA/TA assistance).

At the *middle and high school* level for calendar year 2020, the average annual expense for tuition and cost of living was \$41,636 per year after financial assistance was subtracted. The financial aid in this category averaged \$2,580 annually per student.

Increasing financial aid resources could boost competition among educational institutions in attracting international students. In addition to attracting students, financial aid is an effective tool to retain quality students.

\$30,483
\$30,582
\$25,097
\$225,097
\$225,096
\$224,801
\$41,718
\$41,581
\$41,982

GRADUATE COST

UNDERGRADUATE COST

(AFTER FINANCIAL AID)

Figure 2. Impact of Financial Aid for University International Students

Source: DBEDT: respective years of IES

UNDERGRADUATE COST

GRADUATE COST (AFTER

FINANCIAL AID)

Countries and places of origin of international students in Hawaii

Table 5 lists the top 25 countries of origin for Hawaii's international students in 2020. Japan remained the top country of origin in 2020, comprising 32.3 percent of the total. Japan was followed by South Korea with 13.7 percent, China (including Hong Kong and Macao) with 10.7 percent, Philippines with 4.5 percent, and Tonga with 2.9 percent.

Table 5. Places of Origin of International Students in Hawaii in 2020

Rank	Country/Place	No. of Students	% of Total
1	Japan	1,775	32.3%
2	South Korea	753	13.7%
3	China (PRC, HK, Macao)	590	10.7%
4	Philippines	245	4.5%
5	Tonga	159	2.9%
6	Canada	137	2.5%
7	Taiwan	129	2.3%
8	Germany	106	1.9%
9	Mongolia	95	1.7%
10	Switzerland	95	1.7%
11	Western Samoa	86	1.6%
12	Vietnam	75	1.4%
13	Norway	74	1.3%
14	Australia	67	1.2%
15	Thailand	62	1.1%
16	New Zealand	60	1.1%
17	Fiji	56	1.0%
18	French Polynesia	53	1.0%
19	Brazil	51	0.9%
20	Indonesia	51	0.9%
21	Malaysia	50	0.9%
22	France	40	0.7%
23	India	38	0.7%
24	United Kingdom	35	0.6%
25	Kiribati	32	0.6%

Source: DBEDT, 2021 IES

In comparing the 2020 rank order with 2019, the top two positions remained the same, Japan and South Korea. Some notable increases were China which increased from fourth to third, Tonga which increased from twelfth to fifth, and the Philippines which increased from seventh to fourth. On the other hand, overall, European countries dropped in the rankings: Switzerland from third to tenth, Germany from fifth to eighth, and France from sixth to twenty second. As noted earlier, the pandemic had a larger impact on short-term programs and so a majority of the rank order changes were related to short-term programs.

IV. CONCLUSIONS

The data presented in this report were the results of the *2021 Hawaii International Education Survey*. DBEDT received responses from 37 of Hawaii's educational institutions with international students. The total direct economic impact of international students for the 2020 calendar year was an estimated \$113.2 million, including tuition and fees plus living expenses. Of this, \$99.3 million was from long-term programs and \$13.9 million was from short-term programs.

In addition to the direct impact, other economic benefits of international students for the 2020 calendar year were:

- \$223.0 million added to the state's total economic output, including direct, indirect, and induced effects.
- \$15.7 million in state taxes was generated.
- \$97.3 million in household earnings can be attributed to international students.
- 3,011 jobs were supported by international student spending.

The 2020 average annual spending per student for all programs was \$20,593, including tuition and fees plus living expenses. For each respective category, average annual spending for long-term students was \$28,081 and \$7,096 for short-term students.

The amounts above do not include contributions from foreign schools to Hawaii, such as school excursions and other education-related travel. These education-related trips from high schools and colleges from abroad are an important contribution to Hawaii's economy. However, as of this writing, comprehensive data was not available, and the effects of education-related travel is an area for future research.

This year's survey results shed light on the impacts of the COVID-19 pandemic on Hawaii's international students. Short-term programs had drastic decreases, while long-term programs held fairly steady from the previous year. In looking forward, Hawaii will continue to experience either direct or residual effects of the pandemic in the near future. However, in looking beyond COVID-19, Hawaii is well positioned to attract more international students for both long-term and short-term programs.

APPENDIX I: 2021 Hawaii International Education Survey (calendar year 2020 data)

International Education Online Survey

Department of Business, Economic Development & Tourism

1. CONTACT INFORMATION			
Name			
Institution			
Address			
City/Town			
Zip Code/Postal Code			
Email Address			
Phone Number			
2 through 4. ENROLLMENT			
Please choose the most applicable category or ca			
	Spring 2020	Summer 2020	Fall 2020
Total enrollment			
INTERNATIONAL Students			
Middle/high school students			
Degree-seeking undergraduate students			
Non-degree-seeking undergraduate students			
Degree-seeking graduate students			
Non-degree-seeking graduate students			
5 & 6. Please indicate the international student en 2020 (combined spring, summer, fall) by each of the average program length in days for calendar year awere multiple programs, please report the average category). If you need to clarify your answers, you	ne following cate 2020 for each of a number of days	gories. Please in the following cat s for each respec	dicate the egories (if there
			Length of Program (days)
Short-term training program students/profession	als		
Students in summer/winter camps			
Visiting scholars/teachers			

8 through 11. TUITION AND FEES: Please indicate the <u>cost of tuition and fees</u> for the following categories of international students & scholars (Spring, Summer, Fall for long-term; calendar year for short-term programs). Please specify the time period (e.g. per week, per month, per x-week term, per year).

	Cost of tuition & fees
Middle/high school students	
Degree-seeking undergraduate students	
Non-degree-seeking undergraduate students	
Degree-seeking graduate students	
Non-degree-seeking graduate students	
Short-term training program	
students/professionals	
Students in summer/winter camps	
Visiting scholars/teachers	

12 through 15. COST OF LIVING: Please indicate the <u>cost of living</u> for the following categories of international students & scholars (Spring, Summer, Fall for long-term; calendar year for short-term programs). Please specify the time period (e.g. per week, per month, per x-week term, per year).

	Cost of living
Middle/high school students	
Degree-seeking undergraduate students	
Non-degree-seeking undergraduate students	
Degree-seeking graduate students	
Non-degree-seeking graduate students	
Short-term training program	
students/professionals	
Students in summer/winter camps	
Visiting scholars/teachers	

16. FINANCIAL ASSISTANCE: For calendar year 2020 (January through December), please indicate the lump sum amount of financial assistance through tuition waivers, scholarships, and any other financial assistance to INTERNATIONAL students/scholars in US dollars (i.e. add up all the financial support given to students in that category and report the amount).

	Dollar amount
Middle/high school students	
Degree-seeking undergraduate students	
Non-degree-seeking undergraduate students	
Degree-seeking graduate students	
Non-degree-seeking graduate students	
Short-term training program	
students/professionals	
Students in summer/winter camps	
Visiting scholars/teachers	

17 through 19. PLACE OF ORIGIN (for Spring, Summer, Fall) Number of students

	Number of students
American Samoa	
Argentina	
Australia	
Belgium	
Brazil	
Cambodia	
Canada	
Chile	
China, PRC	
China, Hong Kong	
China, Macao	
Colombia	
Costa Rica	
Czech Republic	
Denmark	
Ecuador	
Egypt	
Fiji	
Finland	
France	
French Polynesia	
Germany	
Greece	
Hungary	
India	
Indonesia	
Iraq	
Ireland	
Israel	
Italy	
Japan	
Jordan	
Kazakhstan	
Kenya	
Kiribati	
South Korea	
Laos	
Lebanon	
Lithuania	
Malaysia	
Marshall Islands	
Mexico	
Micronesia	
Mongolia	
Morocco	
Nepal	
Netherlands	
Nov. Zooloval	

New Zealand

Nicaragua
Norway
Pakistan
Palau
Peru
Philippines
Poland
Portugal
Romania
Russia
Saudi Arabia
Singapore
Slovakia
South Africa
Spain
Sri Lanka
Sweden
Switzerland
Taiwan
Thailand
Tonga
Turkey
Ukraine
United Kingdom
Uruguay
Venezuela
Vietnam
Western Samoa
Other (Please Specify)

APPENDIX II: List of the Educational Institutions Surveyed *(calendar year 2020 data).*

Table All.1: The list is based on the US Department of Homeland Security's (DHS) database called SEVIS (Student and Exchange Visitor Information System):

Flight Schools				
Mauna Loa Helicopters	Flight School	73-310 Uu Street Kailua-Kona, HI, 96740		
Language Schools				
Academia Language School	Language School	1600 Kapiolani Blvd. Suite 1215 Honolulu, HI, 96814		
EF International Language Schools, Inc.	Language Schools	EF International Language Schools, Inc. Honolulu, HI, 96815		
Institute of Intensive English, Ltd.	Language School	2155 Kalakaua Avenue, Suite 700 Honolulu, HI, 96815		
Intercultural Communications College	Language Schools	810 Richards Street Honolulu, HI, 96813		
Hawaii English Language Program	Language School	1395 Lower Campus Road, MC 13-1 Honolulu, HI, 96822		
Global Village Hawaii	Language Schools	1440 Kapiolani Blvd. Honolulu, HI, 96814		
Maui Language Institute	Language School	310 W Kaahumanu Avenue Kahului, HI 96732		
Massage/Beau	ity/Cosmetology/A	Alternative Medicine		
Aisen Shiatsu Chiryo Doin	Massage School	1314 South King Street, Suite 601, Honolulu, HI 96814		
Hawaii Massage Academy	Massage School	1750 Kalakaua Avenue Suite 3004 Honolulu, HI, 96826		
Institute of Clinical Acupuncture and Oriental Medicine	Alternative Medicine	100 N Beretania Street, Suite 203 B Honolulu, HI, 96817		
Makana Esthetics Wellness Academy	Beauty School	560 N Nimitz Hwy Ste 125D Honolulu, HI, 96817		
Pi	rimary/Secondary	Schools		
American Renaissance Academy	Primary/Secondary School	300 Franklin Ave Kapolei, HI 96707		
Asia Pacific International School	Secondary School	54-230 Kamehameha Hwy Hauula, HI, 96717		
Haleakala Waldorf School	Secondary School	4160 Lower Kula Road Kula, HI, 96790		
Hanahauoli School	Primary School	1922 Makiki St, Honolulu, HI 96822		
Hanalani Schools	Secondary School	Admissions Office Mililani, HI, 96789		
Hawaii Baptist Academy	Secondary School	2429 Pali Highway Honolulu, HI, 96817		

Hawaii Preparatory	Primary/Secondary	65-1692 Kohala Mountain Road		
Academy	School	Kamuela, HI, 96743		
Hawaiian Mission	Primary/Secondary	1415 Makiki Street		
Academy	School	Honolulu, HI, 96814		
Hongwanji Mission School	Secondary School	1728 Pali Highway		
	D: (0 1	Honolulu, HI, 96813		
Honolulu Waldorf School	Primary/Secondary School	350 Ulua Street Honolulu, HI, 96821		
Iolani School	Secondary School	563 Kamoku Street		
Totalii School	Secondary School	Honolulu, HI, 96826		
Island Pacific Academy –	Secondary School	909 Haumea Street		
Upper School		Kapolei, HI, 96707		
Kaimuki Christian School	Secondary School	1117 Koko Head Avenue Honolulu, HI		
Kohala High School	Secondary School	54-3611 Akoni Pule Hwy, Kapaau, HI 96755		
La Pietra Hawaii School	Secondary School	2933 Poni Moi Road		
for Girls	·	Honolulu, HI, 96815		
Makua Lani Christian	Secondary School	74-4966 Kealakaa Street		
Academy		Kailua-Kona, HI, 96740		
Maryknoll School	Secondary School	1526 Alexander Street		
Maui Preparatory	Secondary School	Honolulu, HI, 96822 4910 Honoapiilani Highway		
Academy	Secondary School	Lahaina, HI, 96761		
,		, , , , , , ,		
Le Jardin Academy	Secondary School	917 Kalanianaole Highway Kailua, HI, 96734		
Parker School	Primary/Secondary School	65-1224 Lindsey Rd Kamuela, HI 96743		
Punahou School	Primary/Secondary School	1601 Punahou Street Honolulu, HI, 96822		
Sacred Hearts Academy	Secondary School	3253 Waialae Avenue		
	Secondary Sensor	Honolulu, HI, 96816		
Saint Anthony	Primary/Secondary	148 Makawao Street		
	School	Kailua, Hawaii 96734		
Saint Louis School	Secondary School	3142 Waialae Avenue		
Seabury Hall	Secondary School	Honolulu, HI, 96816 480 Olinda Road		
Scabury Han	Secondary School	Makawao, HI, 96768		
St. Joseph School of Hilo	Secondary School	1000 Ululani Street		
	·	Hilo, HI, 96720		
The St. Andrew's Schools	Secondary School	224 Queen Emma Square		
	0 1 0 1	Honolulu, HI, 96813		
Trinity Christian School	Secondary School	1110 A Kailua Road Kailua, HI, 96734		
Mid-Pacific Institute	Primary/Secondary	2445 Kaala Street		
True I werne Institute	School School	Honolulu, HI, 96822		
Post-secondary Institutions — University/College				

Brigham Young	University/College	55-220 Kulanui Street		
University-Hawaii		Laie, HI, 96762		
Central Pacific College	University/College	1833 Kalakaua Avenue Suite 510		
		Honolulu, HI, 96815		
Chaminade University of	University/College	3140 Waialae Avenue		
Honolulu		Honolulu, HI, 96816		
Hawaii Pacific University	University/College	1164 Bishop Street		
		Honolulu, HI, 96813		
Hawaii Tokai	University/College	91-971 Farrington Highway		
International College	TT ' ' /O 11	Kapolei, HI, 96707		
International Mid Pac	University/College	1311 Kapiolani Blvd. 200-5		
College	I Indiana maitra/Callaga	Honolulu, HI, 96814		
University of the Nations, Kona	University/College	75-5851 Kuakini Highway Kailua-Kona, HI, 96740		
	11 ' ' ' (0.11	1 1		
Wayland Baptist	University/College	95-1091 Ainamakua Drive		
University – HI	II.: CII -:	Mililani, HI, 96789		
	University of Hawaii	· ·		
Hawaii Community	University/College	200 W. Kawili Street		
College	**	Hilo, HI, 96720		
UH Center at West Hawaii	University/College	81-964 Halekii Street		
	TT 1 1 10 11	Kealakekua, HI, 96750		
Kapiolani Community	University/College	4303 Diamond Head Road		
College	TI : '/C 11	Honolulu, HI, 96816		
Kauai Community College	University/College	Kauai Community College - University of		
- University of Hawaii		Hawaii Lihue, HI, 96766		
Leeward Community	University/College	96-045 Ala Ike		
College	Olliveisity/College	Pearl City, HI, 96782		
Honolulu Community	University/College	874 Dillingham Blvd.		
College	om versity/ conege	Honolulu, HI, 96817		
University of Hawaii at	University/College	University of Hawaii at Hilo		
Hilo		Hilo, HI, 96720		
University of Hawaii at	University/College	University of Hawaii at Manoa,		
Manoa	, 5	OVCAA/OIEP/ISS		
		Honolulu, HI, 96822		
University of Hawaii at	University/College	Outreach College		
Manoa - Outreach College-		Honolulu, HI, 96822		
UHM				
University of Hawaii Maui	University/College	University of Hawaii Maui College		
College		Kahului, HI, 96732		
Windward Community	University/College	45-720 Keaahala Road		
College		Kaneohe, HI, 96744		
University of Hawaii	Law School	2515 Dole Street		
William S. Richardson		Honolulu, HI, 96822		
School of Law	M. E. 10 1 1	(£1 II.1. Charach		
University of Hawaii	Medical School	651 Ilalo Street		
John A. Burns School of		Honolulu, HI, 96813		
Medicine Decrees Decree				
Educational Exchange Programs				
Japan-America Institute of	Educational	JAIMS		
Management Science	Exchange	6660 Hawaii Kai Drive		
(JAIMS)		Honolulu, HI, 96825		

APPENDIX III: Total Economic Impact of International Students within the University of Hawaii System on the State's Economy

1. **Direct Economic Impact.** Table AIII.1 presents a summary of the direct impact of University of Hawaii's international students to the state's economy. It is based on international student expenditures for tuition/fees and living expenses. The table includes the contributions of long-term and short-term students and is categorized by the type of program.

Table AllI.1: Direct Economic Impact of International Students for the University of Hawaii System, 2020

Category of International Students	Number of Students	Spending by International Students:		Total
		Tuition & Fees	Living Expenses*	
Long-Term Students	1,612	\$32,307,057	\$24,608,157	\$56,915,214
Degree-seeking undergraduate students	1,040	18,674,799	16,460,039	35,134,838
Degree-seeking graduate students	572	13,632,258	8,148,118	21,780,376
Short-Term Students	1,329	\$3,250,032	\$5,810,189	\$9,060,221
Non-degree seeking undergraduate students	333	1,499,293	1,300,671	2,799,964
Non-degree seeking graduate students	92	890,050	548,420	1,438,470
Short-term training program students/professionals	493	638,585	431,562	1,070,147
Students in summer/winter camps	194	222,104	297,419	519,523
Visiting scholars/teachers	217	0	3,232,117	3,232,117
Total	2,941	\$35,557,089	\$30,418,347	\$65,975,435

Source: DBEDT, 2021 Hawaii IES

The above figures are aggregated from the following University of Hawaii related institutions: Hawaii Community College, Honolulu Community College, Kapiolani Community College, Kauai Community College, Leeward Community College, Windward Community College, UH-Maui College, UH-HELP, UH-Hilo, UH-Manoa, UH-William S. Richardson School of Law, UH-Outreach, and UH-West Oahu.

^{*}Living expenses were reduced by 15% to account for international students that telecommuted from their home countries for part of the year.

2. Total Economic Impact and Number of Jobs Supported. The total economic impact for the state included both the direct, indirect and induced impacts. The multipliers used for this calculation are taken from *The Hawaii State Input-Output Study: 2017 Benchmark Report* (December 2020). Type II final demand multipliers were used, which include direct, indirect, and induced effects.

Tables AIII.2 summarizes the results and shows the economic impact of international students studying at various campuses across the University of Hawaii System. The *total output generated* is an estimate of the total dollar change in output in all industries in the state, resulting from international student expenditures (living expenses and tuition/fees) attending the University of Hawaii. Based on the direct-output of \$66.0 million, the total output generated by international students for the University of Hawaii System was estimated at \$130.0 million (Type II multiplier) for calendar year 2020.

Table AllI.2: Economic Impact of International Students within the University of Hawaii System on the State's Economy

	Final Demand Multiplier (Type II)	Economic Impact (Type II)
Total Output Generated	1.97	\$129,971,607
Total Household Income Generated	0.86	\$56,738,875
Total State Taxes Generated	0.139	\$9,170,586
Total Number of Jobs (2020)	26.6 (per \$million)	1,755

Source: DBEDT, calculations are based on the Hawaii State Input-Output Study: 2017 Benchmark Report (December 2020)

Total household income generated refers to the estimated household earnings that can be attributed to international students studying within the University of Hawaii system. Hawaii households earned an estimated \$56.7 million generated from University of Hawaii's international students for calendar year 2020.

The *total state taxes generated* line shows the estimated tax revenue that can be attributed to international students studying within the University of Hawaii system. An estimated \$9.2 million in state taxes was generated by University of Hawaii's international student spending for calendar year 2020.

The last line of the table shows the *total number of jobs supported* by international students studying within the University of Hawaii system. Given an estimated direct economic impact of \$66.0 million for calendar year 2020, 1,755 jobs were supported. As noted above, these estimates are based on the Type II multiplier, which includes direct, indirect, and induced effects.